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A COMPARISON OF STUDENT AND FACULTY PERCEPTIONS
OF THEIR COLLEGE ENVIRONMENT

by



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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "A Comparison of Student and Faculty Perceptions of Their College Environment" submitted by Daniel James Cornish in partial fulfillment of the requirements for the degree of Master of Education.

ABSTRACT

The purpose of this study was to provide information about the different perceptions of the environment held by groups in particular colleges. The information provided was to facilitate between-group and inter-college comparisons. The study also attempted to provide an assessment of the College and University Environment Scales for use in two-year colleges in Alberta.

Information on perception was collected from first and second-year students, faculty, and administrator groups in four Alberta colleges. The instrument used was the College and University Environment Scales: Second Edition and it revealed perceptions on seven scales: Practicality, Community, Awareness, Scholarship, Propriety, Campus Morale, and Quality of Teaching and Faculty-Student Relationships. Two scoring methods were used. The first method was the original method of the instrument. On the basis of method one an item analysis revealed 33 items which discriminated poorly between colleges and groups. These items were dropped and method one was rescored. Method two yielded individual and group scores and allowed between-group comparisons using the t test for independent sample means.

First-year students tended to score higher than second-year students when both scoring methods were used. The faculty also tended to have higher scores than did the second-year students. Combining administrators with faculty groups yielded higher scores in at least half of the colleges. These general trends were more obvious in some colleges than in others and in some cases clear

exceptions to the trends emerged. Method two provided results in the same general direction as method one although scores were generally lower. Between-college comparisons indicated that colleges were similar in some areas and very different in other areas.

The most obvious implication of the findings was the need for serious thought to be given to the rationality of allowing such differences to continue or to the establishment of a communication network that would decrease the differences or use them to advantage. A number of specific recommendations were made: (1) Continued study could be made to develop a CUES-like instrument that would be a truer representation of the person-environment interaction and not just the group-environment interaction; (2) Responses to the CUES could be tried over a five point scale to allow for a meaningful zero response; (3) Addition of more items for the faculty and administrators would be beneficial; (4) Care must be taken in personal data questions to ensure that adequate information is collected so as to judge respondent eligibility; (5) The second scoring method should not be used; (6) Examination of tolerance toward between-group differences in colleges would add to the CUES' information; (7) An examination of the relationship between CUES' scores and some measure of student achievement would be worthwhile, although this would necessitate a better individual score on the CUES; (8) The CUES could be administered yearly to provide a longitudinal profile of a college's major features; and (9) The CUES could be modified to ask participants to personally respond to items instead of reporting what they felt to be generally characteristic.

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Chapter 1

INTRODUCTION

ORIENTATION

Drawn into a formal organization under the Colleges Commission by The Colleges Act, the public colleges show every prospect of becoming well-attended, significant institutions of post-secondary study in Alberta. Charged with the responsibility of coordinating college activities the Commission is grappling with problems related to the rationalization of a college system in Alberta. The colleges themselves, if projected figures prove correct, stand on the threshold of burgeoning populations.

At any point in the development of a college system the need for members of the coordinating body to know how various institutions perceive their particular environments should be clearly obvious. In addition one can readily understand the importance for individual college administrators to understand what groups within the college perceive to be the dominant characteristics of their college.

As Campbell (1969:42) stated, "Canada is in the midst of a spectacular expansion in its post-high school institutions of higher education. This rapid evolution cannot fail to have profound effect . . . ". Such has been the case in Alberta where eleven years following the Alberta Public Colleges Act of 1958, The Colleges Act established a system of community colleges. In the United States the move from the first junior colleges of 1850 to the emergence of full-blown colleges of community service took until c. 1945. Harlacher (1969:2) pointed out that Thornton:

. . . has characterized the evolution of the community college in three stages, which are related to the major purposes of function of the institutions. The first two stages he refers to as "education for transfer" (1850-1920) and the expansion of "occupational programs" (1920-45). The addition of occupational curricula gave the junior college a new complexion. Nonetheless, it did not achieve its full stature as a community college until the development of the third stage, beginning approximately 1945, when the community services concept apparently saltated into being.

Whether or not the colleges in Alberta are "community" in any sense of the word will be debated in the months and years to come. The fact however remains that the provisions of The Colleges Act in Section 27 clearly allows the possibility of a broadly based program in the Alberta colleges.

A college Board may provide at a college the following:

- (a) courses of general, academic, vocational, cultural or practical nature, subject to the approval of the Commission, and
- (b) short courses or short programs to meet the needs of special interest groups.

What took nearly a century to occur in the United States has, in law at least, occurred in ten years in Alberta. Of course the issue still stands for some of the colleges; for at least two the word "community" has been adopted into the official college title. Others are making clear strides in their attempts to develop "community" programs.

The significance of this lies in the fact that a wealth of experience is available to colleges that decide to move into the "community" circle. The fact also remains that such a change is going to take place rapidly and great strain may be placed on college boards, administrators, faculties, and students as their institutions attempt to branch into many areas at the same time. Conflicts of expectation and demand are bound to arise as the "evolutionary" process gains momentum. Perceptions of what the colleges exist to do are bound to differ. For these reasons it would seem very prudent for policy makers, administrators, instructors, and students to lay open, for examination, their perceptions of the college environment. Hopefully this will enable all groups concerned with the colleges to forge realistic aims and to reach realistic achievements for their individual colleges.

STATEMENT OF THE PROBLEM

In view of the general considerations outlined above this study attempted to compare perceptions of the college environment shared by members of specified functional groups with perceptions held by other groups within the college. From these perceptions within various colleges a broad view of the environment held by the groups as a whole within each college was drawn together to develop profiles of the total college environment. Using these profiles comparisons were made from college-to-college.

Within Each College

The following comparisons were made within each college:

- 1) First and Second-Year Students,
- 2) Second-Year Students and Faculty,
- 3) Second-Year Students and Administration/Faculty, and
- 4) Faculty and Administration.

Comparisons were also made among the groups on the bases of distribution by sex, age, and program.

Between Colleges

The following comparisons were made between colleges:

- 1) Comparison of all colleges on seven scales, and
- 2) A more careful examination of non-university-city colleges and university-city colleges.

DEFINITION OF TERMS

Perception of the Environment

The manner in which each person selectively structured the common objective situation resulted in his perception of the environment. The structure was the result of inner needs (need-dispositions), past experiences, and preferred ways of social interaction to name the more common determinants. In effect it was an effort on the individual's part to adapt to situational pressures which bore on him. When you asked a person to characterize his environment the result was a description of what he felt subjectively to be significant. Environment, in a psychological sense, was what it was perceived to be by the people who lived in it. Granting possible large scale delusion, the perceived reality still influenced ones behavior and responses. Thus, realistically, what people thought was true was true for them. (Pace, 1969b:7)

College Environment

In this study college environment was defined as those aspects of situations within the college that acted upon the individual by producing certain demands which a person perceived as pressures to behave in certain characteristic ways. Those aspects of the college which appeared to be objectively present constituted the environment.

Characteristic

"Characteristic", in this study, was used to mean dominant, and in this sense it was obvious that any response on the study instrument would have to be more than fifty percent. Statements about the environment were judged to be "characteristic" when a level of consensus of two-to-one or greater was reached.

ASSUMPTIONS

This study operated on the assumptions that:

1. Such a phenomenon as a college environment existed;
2. The environment did exert pressure on individuals;
3. The psychological concept of perception was a reality;
4. Perception was sufficiently similar in certain individuals to cause them to act as a group; and
5. Perception from group to group was different.

DELIMITATIONS

The study operated under the following delimitations:

1. Respondents were asked to consider only the college environment in which they operated;
 2. Only faculty and students who had been in the college for at least a year and in full-time attendance were used in the study.
- This delimitation was necessary to satisfy the requirements of the instrument; and

3. No one from outside the colleges was asked to participate in the study.

LIMITATIONS

The study operated under the following limitations:

1. The effectiveness of the study in identifying perceptions was limited by the ability of the technique to elicit these perceptions;
2. The study was further limited by the amount of care taken by each respondent in responding to the instrument used;
3. The degree of participation as indicated by the rate of returned questionnaires was also a limiting factor; and
4. Only four of the five colleges agreed to participate in the study.

ORGANIZATION OF THE THESIS

The thesis was organized into six chapters following the introduction.

Chapter Two constitutes the development of a conceptual framework for the study. This chapter specifically examines psychological concepts relative to the need-press theory of interaction between person and environment, perception, and the application of these concepts to educational organizations.

Chapter Three contains the design of the research and the instrument used to gather the data. The latter examination includes

a discussion of some of the more pertinent characteristics of the College and University Environment Scales - II (CUES - II) since it represented a considerable departure in method from the usually accepted research questionnaires.

Chapter Five includes two methods for analysis of the data and the subsequent findings.

The final chapter comprises a summary of the study, a brief discussion of the findings, an assessment of the instrument, several implications, and some suggestions for further research.

Chapter 2

CONCEPTUAL FRAMEWORK

INTRODUCTION

No organization is exactly like another even though the individuals within the organization may espouse similar goals. Organizations result from the interaction of programs, workers, administrators, rules, facilities, attitudes, expectations, and roles. These factors are never combined in exactly the same way in any structure. Similarly no single college is exactly like another. "The" college student does not exist, nor does "the" typical college.

In terms of the college and university a number of methods have developed to describe and classify these particular types of educational institutions. As Feldman (1971:51) pointed out in the seven approaches he enumerated, there was no agreement as to the one best way to categorize colleges and measure their environments. Different methods may serve different purposes.

The seventh approach indicated by Feldman was the "Climate" of the college technique. In this method the organization was viewed in terms of the aggregated perceptions of individuals in the college of the events, conditions, practices, opportunities, and pressures of the total environment.

The focus of this approach as Pace (1969b:7) indicated was concerned with deriving an answer to the question, "What do students perceive to be characteristic of the environment?" Environment was defined by consensus in the collective perceptions of students (or other individuals) who live in the environment.

Stern (1970:4-5) also added that "The college community may be regarded as a system of pressures, practices, and policies intended to influence the development of students toward the attainment of institutional objectives."

Relative to the problems of situational analysis Kurt Lewin (1936:11-13) contended that the "cause of events could no longer be sought in the nature of a single isolated object." The demand was for examination of the relationship between an object and its surroundings. One could hope to understand the forces that govern behavior only if one included in the representation the whole psychological situation. Thus it was that every psychological event depended upon the state of the person and at the same time on the environment. Consequently behavior (B) did not exist as a "simple" function of the situation (S) ($B \neq f(S)$). In Lewin's terms behavior was described as a function of the person (P) and the environment (E) ($B = f(P, E)$).

Stern (1970:5) argued that Lewin's formulation was a necessary condition, since the psychological significance of either the person or the environment could be inferred only from one source - behavior. As a consequence of being inferred from the same source a common taxonomy had to be employed for both. The only formal system that lent itself to a consideration of person and environment was the personality and

need-press concepts developed by H. A. Murray.

As a result this chapter will examine the concepts of psychological life space, needs, press, interaction of need-press, perception, and organization considerations related to the need-press model.

PSYCHOLOGICAL LIFE SPACE

The influence of Kurt Lewin on the theorizing of H. A. Murray was obvious. In his early writing Lewin (1936) applied the principles of topology to the study of psychology. His definition of topology clearly foreshadowed the relationship of person and environment. Topology was defined as that most general science of spatial relations which could be based on the relationship between "part" and "whole" or in other words on the concepts of "being-included-in". Thus with this general approach in mind Lewin (1936:11) admitted that:

Even if all the laws of psychology were known, one could make a prediction about the behavior of man only if in addition to the laws the special nature of the particular situation were known.

For Lewin the need was clear; psychologists had to consider this twofold relationship between the person and the environment as a whole situation from which flowed the product of behavior. Unfortunately no common expression existed in psychology at the time to allow for an inclusion of both person and environment. Thus Lewin postulated his concept of psychological life space as the totality of facts which determined the behavior of an individual at a certain moment. Within this life space the psychologist must represent the physical and social environment of the individual. Attempting to distinguish between the "appearance" and the "underlying reality"

within this life space, Lewin (1936:19) considered that within the total situation what was real was what had effects for the individual.

The aspects of his theory which had such a strong affect on Murray were summed up by Lewin (1936:167,168) in the following statements:

In reality however it is impossible to derive the psychological processes in the life space without including changes both of person and environment in the representation.

The dynamic interdependency of two regions implies that the state of the one is influenced by the state of the other.

Thus Lewin made the first general attempt at postulating a conceptual system which included both person and environment. Building on Lewin's work Murray proposed a need-press model to explain behavior as it resulted from an interaction of personality with environment.

Murray's attitude toward the definition of personality and the effects of the environment were evident in some of his more general comments(1938:116).

The representation of personality as a hierarchical system of general tracts of need complexes leaves out the nature of the environment, a serious omission. We must know to what circumstances an individual has been (and is being) exposed.

In a discussion related to the classification of interactions between persons and between persons and other aspects of the environment Murray (1951:435) stated:

The object must be given the same conceptual status as the subject -- the interaction should include as much of the subject's thought and speech as the object's.

He further assumed the proceedings of personality to be broken into two parts: the internal proceeding during sleep, evaluation, selecting goals, etc., and the external proceeding when the personality processes engaged immediately and overtly with one or more things or persons in the environment.

NEEDS

Needs were originally defined by Murray as:

. . . a construct which stands for a force in the brain region, a force which organizes perception, apperception, intellection, conation and action in such a way as to transform in a certain direction an existing, unsatisfying situation. Need is sometimes provoked directly by internal processes (physiological) but more frequently by the occurrence of one of a few commonly effective press.
(Murray, 1938:124)

Murray (1938:60) also pointed out that, "The best way for distinguishing a certain need is the production by the subject of a certain effect". The influence of Lewin-what is real is what has effects- was evident in this comment. Murray was also pointing out that needs were hypothetical entities which were inferred from behavior. A need was the immediate outcome of certain internal and external occurrences and it was a hypothetical process within the brain which, persevering for a time, "pointed" activity and coordinated it.

Murray (1951:435) summed these concepts up in a later comment when he referred to need as:

. . . a nonobservable construct or intervening variable which belongs to the category of disposition concepts
. . . a state characterized by the tendency to actions of a certain kind.

Commenting on Murray's theory of needs, Stern (1970:6,7) made a number of important observations. Identified with the goals or

purposes that an interaction served for the individual, needs were considered to be functional. In this sense a listing of needs was essentially a taxonomy of objectives that persons strove to achieve. Since these needs must be inferred from the observations of an interaction, it became obvious that needs were revealed by the types of behavior in which persons engaged. In this sense a list of needs was a taxonomy of interaction processes. Needs then were defined by Stern (1970:7) as:

. . . a taxonomic classification of the characteristic spontaneous behaviors manifested by individuals in their life transactions.

PRESS

Standing in counterpart to Murray's need theory was his proposal of environmental press. He introduced the concept when he stated:

We should say that the notion of an attracting or repelling object (press) is a necessary complement to the need concept. Need is clearly an emergence from the past or a 'push from the rear'. The environment may be effective in arousing this 'push'. (Murray, 1938:68)

Since an individual operated within an environment which did much to influence his behavior, it was obviously necessary to characterize each confronting situation, physical and social, to gain an understanding of the person's conduct. Thus, what an organism knew or believed was, in some measure, a product of formerly encountered situations. For these reasons the individual and his milieu had to be considered together as a single creature-environment interaction.

As a consequence of these considerations Murray (1938:40) stated:

In crudely formulating an episode it is dynamically pertinent and convenient to classify the stimulus situation according to the kind of effect -- facilitating or obstructing -- it is exerting or could exert upon the organism. Such a tendency or a 'potency' in the environment may be called a press. It could be said that press is a temporal gestalt of stimuli which usually appears in the guise of a threat of harm or promise of benefit.

Two types of press were defined within Murray's (1938:122) framework.

Beta Press

Beta press was the subject's own interpretation of the phenomena that he perceived. This was the unique and inevitably private view each person had of the events in which he took part. It is important to be aware, as discussed elsewhere, (Stern, 1970:7 and Stern, Stein, & Bloom, 1956:37) while beta press was the interpretation of the press by the participant in the transaction, it was also possible for a particular way of perceiving to be shared by members of a functional group. This usually represented some of the means by which the group maintained its orientation to reality. Thus beta press were important as representations of the perceptions and meanings which were shared by a given group of individuals. This suggested an important distinction between the idiosyncratic private beta press and the mutually shared consensual beta press. (Stern, 1970:7)

Alpha Press

Alpha press was that press which actually existed, as far as scientific inquiry could determine. Thus alpha press was comprised of elements in the environment which existed as inferred by the trained observer and were capable of affecting the behavior of the participating individual. Murray (1951:438; 1959:27) observed that for Lewin the exterior field (environment) was within the subject's head. Lewin's "psychological environment" was the subject's apperceptions of the environment. Here Murray (1959:26) made a distinction between perception as clear impression and identification of a particular kind of object and apperception as the realization of the object's properties. While Lewin's concept of life space or psychological environment was an important construct it left no room for what Murray called the more "objective" definition of the environment as it was apperceived by the psychologist, by selected judges, or by the conventional majority. Murray remedied this by postulating his need-press theory with the beta-alpha press distinction.

Stern (1970:7-8) enlarged on these concepts when he pointed out that press included conditions of impediment to need as well as conditions that were likely to facilitate the need's expression. These conditions which established what was commonly referred to as the climate or atmosphere of an institution, were to be found in the structure created or tolerated by others. The components of this structure may be physical as well as social but, insofar as the maintenance of the existing conditions may be attributed to the group's acceptance of these conditions, press may be defined (like needs) as a taxonomic classification of characteristic behaviors manifested

by aggregates of individuals in their mutual interpersonal transactions. This definition applied to institutional situations as well as to the dyadic relationship between two individuals, in which the needs of one constituted the press for the other.

INTERACTION OF NEEDS AND PRESS

Stern (1970:8) continued to point out that an alpha press referred to a situational stimulus configuration potentially capable of shaping a particular class of behavioral responses, as seen by a detached and knowledgeable observer. Stern (1970:8) indicated that:

The needs components of any given interaction relate to the situational press in an adaptive manner, but the character of that adaptation will be the function of the total person and the total environment at the given moment in time.

This presumed that the adaptation would be unique for any individual. However, to the extent that one could assume sufficient similarities in needs configurations among subgroups of individuals personality types could be postulated. Individuals of the same personality type would be expected to respond in similar ways to similar environmental press configurations.

Writing earlier Stern (1964a:161-168) had pointed out that Lewin's formulation had attempted to conceptualize behavior as a molar event. The formulation of behavior as a function of the person and the environment, $B = f(P,E)$, was discussed and broken down into a number of sufficient molar conditions.

The Person

The Person ($P = B/E$) was represented as a behavioral residue from which all shapers of events had been abstracted. There were three components of the person: Percepts or contextual signs relevant to specific behavior B_i had to be recognized and distinguished from those for B_n . This involved a knowledge of the meaning of the situation and included a response to the motivational properties of the external stimulus pattern; Needs in the B_i situation also depended on what the person perceived to be relevant and in turn on his need to respond appropriately; Sanctions could be applied in the situation if disapproval from the group developed from the behavior, B_i .

The Environment

The Environment ($E = B/P$) was represented as the reciprocal of the personal determinants of behavior. As such these conditions were already accounted for through incorporation in the person's percepts. This reciprocal aspect of the psychological properties of the environment and the person became clear when one recognized that any description of the situation must take into account the expectancies which were as firmly embedded in the perceiver as in the perceived.

A logical conclusion of these observations would be that phenomenal reality was idiosyncratic and the only way to examine the problem would be to work with each person as an individual unit to match his needs with his press. Stern (1970:11) noted, however, that a more practical alternative was presented through observations on phenomenological analysis made by McLeod (1951:236,237):

The bulk of phenomena are not mine at all, any more than they are yours. You and I observe and describe the same object

. . . . The basic fact of phenomenological objectivity is the fact which renders possible the understanding of one person by another. We do not primarily live in private worlds. For each of us there are some phenomena of a private or subjective nature but together we live in a public world, a world which contains people as well as things.

In Stern's (1970:12) words:

. . . the perceived environment is both personal and consensual. It includes a public world largely shared by other . . . selves viewing each other as external people confronting the same external circumstances . . . the collectively perceived significates of various press are an entirely adequate source from which to infer the environmental situation to which individuals are responding.

Press then, like needs, may also be inferred from self estimates of the resources, expectancies, and behaviors likely to be characteristic of others in a given situation rather than one's self.

PERCEPTION

Throughout the above discussion of the need-press theory the basic issue of perception has arisen a number of times.

McLeod (1951:222) indicated that one view of social psychology dealt with an attempt to find in the psychology of perception the basis for the understanding of social behavior and experience.

. . . if we are to understand the social behavior of man we must understand the structure of the social world . . . as it is actually apprehended by the behaving individual. The problem, then, is essentially a cognitive problem, and the basis of cognition is perception.

Murray assumed its operation as part of the manner in which the individual received information about his environment. He even went so far as to make the perception/apperception distinction noted above on page sixteen. Clearly perception was the key factor in the viability of postulating a beta press situation. The alpha press

was more closely associated with Murray's definition of apperception:

The process in the subject which recognizes what is being done to him at the moment (that says good or bad) may be termed "pressive perception". The power of a pressive situation usually depends, not on perceptive press but upon pressive apperception -- the situation may do this to me or I may use the situation thus and so. (Murray, 1938:119)

An understanding of perception is vital to fuller appreciation of Murray's need-press concepts.

Litterer (1965:41-65) made a thorough examination of perception in relation to organizations. People do act on the basis of what they "see" and in understanding behavior it must be recognized that facts which people do not perceive as meaningful usually will not influence their behavior. Things they believe to be real, however, even though factually incorrect or nonexistent, will influence their behavior.

The purpose of the organization was to bring about integrated behavior and this required similar, or at least compatible, perceptions on the part of organizational members. A reciprocity did exist which one must recognize and it was the fact that many things which influence perception were, in turn, directly or indirectly influenced by the organization. For these reasons a knowledge of the mechanisms of perception and things that influence it was considered important.

Mechanisms of Perception

1. Cues. In learning about things we learned what they meant. Most of these meanings were products of background and culture. Consequently the relationship of meanings and cues with which a person was familiar affected his perception. (Litterer, 1965:43)

2. Thresholds and the idea of selectivity. All persons were sensitive to certain stimuli. When these appeared the individual was instantly alert and eager to examine them; other stimuli did not rise above the individual's threshold. Resonance produced an understanding of an item or situation similar to that of others. (Litterer, 1965:44)

3. Closure reflected the individual's filling in of partial information in an effort to maintain consistency between his impressions of the world and his self-image. (Litterer, 1965:46)

4. Stereotyping was the process whereby the perceiver placed other persons into gross categories to which were ascribed sets of general characteristics. (Costello and Zalkind, 1963:25-34)

5. Projection was described as the process of ascribing or attributing to others characteristics which were really one's own. (Costello and Zalkind, 1963:36)

6. Perceptual defense was described as the mechanism of putting on blinders to avoid becoming aware of things or events that might be disturbing. (Costello and Zalkind, 1963:37)

7. The final mechanism was called social reality. This category related to individual's efforts to weigh the probabilities and to determine what was significant in the world. The individual needed to know what the "real" world was like so he could behave appropriately. With behavior being influenced, in part, by

perceptions, compatible behavior between persons would be influenced by the congruency of perceptions that people held. As a result people sought the meaning of signals, not to understand the "real" world in any absolute sense, but as an element to permit them to live more satisfactorily in a social world. (Litterer, 1965:49-51)

Factors that Influence Perception

1. People under stress tended to form their impressions more quickly and less accurately. (Smock, 1955:177-182)

2. Group pressure concerned the effect on a person when he realized that his perception of a particular item or situation was different from the perception of his group. In a word the factor involved was conformity. (Litterer, 1965:52)

3. Interaction and participation affected the organization member's feeling of control over the organization, influenced his degree of ego involvement, and reduced the visibility of power. All were factors in perception. (Litterer, 1965:54)

4. Roles by definition influenced expectations for a person in a situation. Different role expectations for the same person could be the cause of perceptual distortion. (Litterer, 1965:55)

5. Reference groups served two functions: the normative function when a person wanted to be included, and the comparative function when the group was used as a reference to evaluate the person. (Litterer, 1965:56-59)

6. Organizational position and job determined what a person did and in turn influenced the way situations looked. As a person moved higher into the organization problems took on a longer time perspective. The higher person in the organization perceived

a wider scope for action than the lower person. A person's position in an organization's communication network also greatly influenced his perceptions. (Litterer, 1965:59-61; Costello and Zalkind, 1963:48)

7. Reward systems could be tied directly to the development of new ideas or to productivity. Under a production plan people perceived activities more in terms of consequences than was so under a plan geared to the production of new ideas only. (Litterer, 1965:61)

8. Characteristics of the perceiver were important influences since the assumptions an individual brought to his assessment of experiences affected perception. (Costello and Zalkind, 1963:45)

9. The characteristics of the perceived such as his status and the visibility of traits being judged, also interfered with perception. (Costello and Zalkind, 1963:46)

To conclude, a reemphasis should be placed on the significance of the perceptual process in Murray's need-press model. Comprehension of perception was necessary to understand Murray's concepts and it will be vital to a future understanding of how the press of an organization can be determined by posing sets of questions to various groups within specified educational institutions. Brown (1967:33) summed up the significance of perception in the analysis of an educational institution when he said:

It is assumed at the outset that one can learn something of the leadership of a school from the staff perceptions This is so because of a more basic assumption that a perception of another person is a function of both sender and receiver of the percept. A descriptive statement based on such perceptions therefore gives away the nature of the describer as well as the described -- sometimes, as with projective materials, to an even greater degree.

ORGANIZATION CONSIDERATIONS

The integral part that perception played in Murray's model was alluded to many times in comments made earlier by Murray and Stern. As a final step some connection should be established between the need-press theory and organizational structure, in particular the administration of educational organizations.

Schein (1965:3,4) made it quite clear that organization psychologists in their studies on worker motivation, incentive systems, personnel policies, and intergroup relations had come to recognize the organization as a total system. Whether worker or manager, an organization existed as a psychological entity to which he reacted. Furthermore the individual did not stand alone against the organization but was integrated into groupings which had patterns of cooperative, competitive, or indifferent relations to one another. Given this situation a new series of questions has arisen about the behavior of groups, subsystems, and the total organization in response to internal and external stimuli.

These kinds of broadly based and integrated concerns were quite consistent with the total environment approach expressed by Murray in his need-press theory. Schein's generally expressed concerns could be characterized as a logical extension of Murray's general approach. They both seem to be concerned with similar issues -- the determinants of personality, whether of the individual or of the organization. In both cases, one factor was the pressure created by the environment on the individual or on the organization.

Murray's concepts were also very closely related to the Getzels-Guba view of educational administration. A brief examination of some concepts related to perception and environment which extend from Getzels' work should be worthwhile.

Role

Getzels (1968:60), in his analysis of administrative behavior, adopted the definition of role used by Parsons and Shils:

In relation to specific groups or institutions in a social system, roles may be thought of as the structural or normative elements defining the behavior expected of role incumbents or actors, that is, their mutual rights and obligations. In this sense, it is what is supposed to be done in order to carry out the purposes of the system rather than what is actually done that defines institutional role.

Expectations

The role had certain normative rights and duties called role expectations. These expectations defined what the individual should do. Thus expectations were rights, privileges, and obligations that a particular role incumbent should do in certain circumstances.

Personality

Drawing from the work of Allport, Parsons, and Shils, Getzels (1968:68-69) defined personality as:

. . . the dynamic organization within the individual of those need-dispositions (affective needs, cognitive dispositions and capacity to structure experience) that determine his unique interaction with the environment.

Thus personality was constantly evolving, tending to fulfill some requirement of the organism, impelling the individual toward particular expressive and cognitive activities, responding differently from

person to person, and, while responding to the environment, personality was also characterized as capable of initiating interaction with the environment. An environment, then, existed as Getzels (1968:70) stated:

. . . by environment we mean not only the geographic setting . . . but also the available roles and statuses, the rights and duties - in a word, the expectations - which . . . form a portion of the objective environment equivalent to the non-human portion.

Need-Dispositions

Need-dispositions were forces in the individual. Preference implied readiness to receive one object over another whereas interest sought out the object. Need-disposition was more akin to interest in this sense. An interest found its existence in a characteristic tendency, organized by experience, which forced a person to seek out particular objects, activities, understandings, and skills for attention or acquisition. Getzels (1968:72) further stated:

A need, as Murray points out, may have its source in viscerogenic as well as experiential processes, not only impelling the individual to attend to or acquire some particular object, but underlying a whole range of behavior, both real and fantasied.

An additional comment on need-disposition was vital at this point. "Need-dispositions influence not only the goals an individual will try to attain in a particular environment but also the way he will perceive and cognize the environment itself." (Getzels, 1968:73) Thus need-disposition was considered to be of critical importance to perception and cognition in the final understanding of job (role) behavior.

To understand only the nature of institutional role and expectation was not sufficient. The nature of each individual in the

role, his mode of perception and reaction to expectations, was important, and as a consequence the administrator must understand the dynamics of the role-personality interaction.

Thus the interplay of institutions with personalities becomes possible as does the possibility for the environment to act upon the individual and the individual to dynamically integrate with the environment. The relation of personality and need-disposition with the potential for selective perception were all vital considerations in understanding an assessment of a college environment through various roles within the institution. The direction which individuals take in perception of the environment to produce their expectations for and reactions to roles is pertinent information for any individual within the institution.

SUMMARY OF THE CHAPTER

The concept of using a person-environment analysis to examine a college environment had a beginning in Lewin's definition of the psychological life space. Lewin's concept attempted to view personality determinants within the framework of the whole environment of the individual. H. A. Murray further developed the relation of person and environment through postulation of the need-press model. Murray defined needs as the personality determinants within the individual, while press constituted all those factors in a person's environment which exerted sufficient pressure upon the personality factors to cause interaction and produce behavior.

The earliest attempts to relate these psychological concepts to the assessment of personality emerged from the Chicago studies of Stein,

Stern, and Bloom (1956). Stern continued the growth of these concepts with his analysis of the need-press relationship as it emerged from Lewin's original contention that behavior was a function of the person and the environment. Further developments occurred when instruments which attempted to assess the person-environment interaction and perceptions of the environment itself were developed by Stern alone, and by Pace and Stern.

The operation of individual and consensual perception ran throughout the development of the person-environment concepts. Perception operated through a number of mechanisms to influence the individual's view of the environment. The mechanisms noted were: cues, thresholds and selectivity, closure, stereotyping, projection, perceptual defense, and social reality.

Additional situational factors such as: stress, group pressure, interaction, roles, reference groups, organizational position, reward systems, and characteristics of the perceiver and the perceived also influenced the perceptual process. An examination of the concepts of role, expectations, environment, need-dispositions, and personality revealed the applicability of the person-environment and need-press concepts to the possible examination of organizations.

Chapter 3

REVIEW OF THE LITERATURE

Having established a conceptual framework related to the "climate" type of institutional analysis, a review of the literature would be appropriate in order to trace the connection developed between the concepts and actual research efforts over the past number of years. This review was not designed to be an exhaustive examination of the literature. The specific intent was to examine significant literature relating to the "climate" analysis of educational institutions. The chapter was handled in three sections: early efforts, the College Characteristics Index - Activities Index and following developments, and the emergence of the College and University Environment Scales.

EARLY EFFORTS

One of the earliest general comments appeared in an article by Pace (1950:411-419) where he indicated that the value of attitude measurement was largely dependent on knowing what behavior was associated with attitudes. Opinions were considered to be verbalized expressions of attitudes. Opinions were not actions but some opinions should correlate with action. Pace (1950:418) stated:

Until we have more evidence of the relation between opinion and action we must regard many of the opinion polls and attitude surveys . . . as interesting observations to be treated with a critical open-mindedness. (Pace, 1950:418)

The next most concrete occurrence in the literature was really the starting point for person-environment analysis of institutions. Stern, Stein, and Bloom (1956) elaborated the need-press concept by applying it to personality assessment studies and by showing that the prediction of performance was improved as one defined the psychological demands of the situation in which the performance was to occur. The psychological demands of the situation were delineated as the environmental press. Writing in the foreward to this book, Murray stated:

In short they would formulate much more specifically than have previous assessors the demands of the prospective situation, . . .

Thus emerged the beginnings of efforts to consider press in the assessment of personality.

The basic approach used in the Chicago studies by Stern, Stein, and Bloom stressed the need for considering behavior from two vantage points, the one emphasized situational determinants such as the goals, cognitive processes, affective processes, institutional roles, practices, and values in the educational institutions under study. Participant observation and anamnestic interviews with critical leaders in each situation provided the raw data from which the press model was developed. The other vantage point emphasized internal needs and capacities such as affect of the socialization process, self concept, concept of others, and social role. The needs configuration of the person was established by means of extensive psychodiagnostic testing.

Behavior was viewed as a resultant of the transaction between person and situation. It was thus possible to structure the problem of

interaction and prediction in terms of the congruence between needs which the individual was internally motivated to work through in behavior, and situational press which provided implicit sources of resolution for such needs.

THE COLLEGE CHARACTERISTICS AND ACTIVITY INDICES AND FOLLOWING DEVELOPMENTS

A short time later, Pace and Stern (1958:269-277) wrote that college cultures could be seen as a complex of environmental press which, in turn, could be related to a corresponding complex of personal needs. Press was operationally defined as the characteristic demands or features perceived by those who lived in the particular environment.

Using Murray's classification of needs Stern constructed several experimental editions of a needs inventory called the Activities Index (AI). Composed of 300 statements of commonplace, socially acceptable activities to which responses of "like-dislike" were given, the index presented results in 30 scales which corresponded to Murray's taxonomy of 30 basic needs.

A corresponding test, the College Characteristics Index (CCI) was constructed by Pace and Stern. Composed of 300 statements about college environments to which a "true-false" response was requested, the statements were organized into 30 ten-item scales with a press scale for each need scale of the AI.

In the period of time which followed the development of the AI and the CCI they were administered to 100 different colleges. In 1959 a norm group of 32 colleges was selected to develop standard scores for

the scales of the CCI and the AI. The major results of this study were reported by Pace (1962).

1. Some things were found to be true of all campuses.
2. Beyond the common characteristics, however, colleges were vastly different. A general index of degree of similarity was developed.
3. The differences between college environments, across a wide assortment of schools, fell into several fairly clear patterns.
4. These patterns were held to have predictable and demonstrable consequences.

A very complete theoretical consideration of the development of the CCI and the AI was written by Stern (1962:5-41). In this article Stern used the results of an extensive testing program to examine the characteristics of the intellectual climate in college environments.

A review of the literature on the college environment was carried out by Pace and McFee (1960:311-320) and they noted four general influences on environment studies; first, the topic was important for future research; second, in recent years a new group of behavioral scientists had become active in the study of higher education, supplementing the process with new concepts; third, many specific studies on characteristics or changes in college students were viewed as contributing to the study of environments; and fourth, descriptive studies, conceptual schemes, and research dealing with the characteristics and operation of organizations appeared with some frequency and offered suggestions for studies of college environments.

Pace and McFee came to the conclusion that a variety of methods had been useful. There was no general agreement about what concepts or methods were most powerful or essential, and no general theory or pattern of analysis had yet found wide acceptance.

In this same report Pace offered a number of important general comments related to college environments:

If press does exist one could expect it to produce change in student personality as a result of pressure to adapt About 30 percent of the distinctive environment of a school is accounted for by the . . . students This leaves most of the potential impact of a college squarely up to the decision of its faculty, administration, and trustees. Environmental press is clearly more than the student culture alone.

McFee (1961) did a study examining the relationship of the environmental estimate arrived at through the CCI and the student's personality characteristics from the AI. The basic concern was to determine if the environmental estimate was independent of student personality. The study failed to find any correlation between scale scores of individuals on the CCI and parallel scores on the AI. Nor was a strong relationship found between personality need and the student's perception of environmental press. The responses to 88 percent of the CCI items were independent of parallel personality needs of the respondent. McFee only examined the relationship between parallel scores on the CCI and the AI. No cross correlations were made.

Using the CCI, Thistlethwaite (1959) attempted to learn from National Merit Scholars what kind of environments they perceived to be conducive to the realization of their potentialities. The analysis related CCI measures to measures of students achievement. Three things

were noted in particular:

1. Student reports provided abundant evidence that college press differed considerably;
2. One type of college press was associated with achievement in the natural sciences, while a different kind of environment was related to accomplishment in the arts, humanities, and social sciences; and
3. An equally important part of the college press consisted of faculty practices and administrative policy.

A final significance of this study lay in the fact that Thistlethwaite used the CCI to evaluate only the environmental press. The same singular concentration on press was to be noted in later work by Pace (1963, 1969a, 1969b).

In a following study Thistlethwaite (1960) used a different approach when he asked a group of winners and near-winners in a national scholarship competition to describe faculty and student press items. Under faculty press, the facilities, faculty, and requirements in their present field of study were described. Under student press the activities and interests of students in their living group and classroom were described.

The results tended to confirm that one type of college press stimulated natural science achievement while a different press stimulated arts, humanities, and social science achievement. The various faculty and student press items in each of the two types of college press were documented. Thistlethwaite also concluded that college environment was an important determinant of the student's motivation to seek advanced training.

The work in college environments continued to advance when Pace (1962:267-277) compared a vignette analysis of San Francisco State College to the CCI analysis. Two very important features emerged from this comparison.

1. While his sample was extremely small (26 students) he argued that it reflected well the diversity of programs and some of the dominant characteristics of the student body. In a postscript to this same article published elsewhere Pace (1968) indicated that a retesting of a better sample in 1965 using the College and University Environment Scales (CUES), a derivative of the CCI, produced confirmation for his conclusions based on the first CCI sample of 26 students.

2. Pace added the further comment that:

One does assume nevertheless, that the aggregate awareness of students or what students perceive with reasonable unanimity to be true and not true about their college, is a potentially valid and fruitful lens through which to examine the college environment.

This was an important comment since it pointed the direction for the rather unique scoring methods to be used in CUES, the instrument employed in this present study.

In discussing environments for learning Stern (1964) indicated that current research suggested group atmosphere and pupil personality were interactive. The success of learning could depend on the optimal combination of teaching technique and student need. In an experiment designed to enable authoritarian students to become more like anti-authoritarian students, Stern demonstrated that the same educational ends could be achieved by very different types of students if the environment was appropriately modified for each type. Included in this

article was another of Stern's very lucid discussions of the need-press theory. Stern (1964b:229) concluded that:

The answer is that the characteristics of the student and the objectives of the program must both be employed as guides in the design of the most effective environment for learning.

A very important study done by Lauterbach and Vielhaber (1966:965-972) at West Point was of considerable importance because of the distinction made between need-press and expectation-press. The authors postulated that the congruence of need-press ~~may~~ not have had so much influence on adaptive behavior as the congruence between expectations for a college and that college's press. As a result students were asked to respond to the CCI in two separate ways. The first asked for descriptions as the student preferred the situation to be (need-press). The second asked students to describe the institution as they saw it (expectation-press). (According to this distinction CUES is an expectations-press instrument.) In commenting on the value of this study the authors indicated that perhaps value lay in helping:

. . . to denote some of the behavioral correlates of student expectations and needs or preferences, required in order to comprehend the role of such concepts in affecting behavior within an institution as urged by Getzels and Guba.

In a study somewhat similar to the one above, Stern (1966:41-43) administered the CCI to a wide sample (3,075) of freshman students on the basis of expectations they held for the college they were to attend. His most clear finding was that entering students had very different perceptions of the campus environment. Analysis of faculty and second-year students' responses on one of the campuses in

the study revealed an academic environment that was different from freshman expectations. The only other group which shared the "freshman myth" was the administration.

More recently Donato (1969) used the CCI in a comparison of perceptions of the college environment held by groups within a college. The purpose of the study was to evaluate whether admissions officers' perceptions of the campus climate as presented to school counsellors were congruent with college environment. The perceptions of the environment held by faculty and staff were assumed to represent the real campus press. The author hoped the study would be useful as a measure of campus environment and as a device to aid admissions officers to make their presentations to high school counsellors more consistent with actual college press.

Younge (1965) in a review of the literature pointed out two methodological problems with the CCI and the AI. The experimental independence of these two instruments was considered difficult to define since measures for both instruments were taken from the same students. Thus to the extent that student characteristics modified what was perceived in an environment and the extent to which the environment modified student characteristics, the interaction was already expressed in the CCI and the AI. Independent measures were required.

Yonge questioned Stern's conclusion that there was a correspondence between the pattern of student bodies and the prevailing press of institutions. Yonge's concern resulted from Stern's comparison of McFee's (1960) correlations between individuals with his correlations based on units of institutions. Comparison of results was deemed to be

difficult.

Yonge concluded that the work of Pace and Stern (1958) was a true breakthrough since they had shifted the research emphasis from a descriptive to a dynamic model. However, further study was required of the relationships among need-press scores.

EMERGENCE OF THE COLLEGE AND UNIVERSITY ENVIRONMENT SCALES

In another review of the literature Michael and Boyer (1965:264-276) directed attention to Pace's development of a new instrument, the College and University Environment Scales - 1963, already alluded to above. Pace demonstrated that the intended parallelism in the organization of factors of the CCI with those in Stern's AI did not occur. As a result Pace developed CUES by selecting 150 of the items from the CCI which successfully discriminated between environments. These were organized into five scales. The items required a true-false response and the scale scores were determined by totaling all the items in each scale which had 66 percent or higher responses in the keyed direction. Thus scoring and interpretation of CUES followed the rationale of public opinion polling.

Michael and Boyer pointed out three advantages of CUES over the CCI.

1. CUES presented a more parsimonious evaluation of institutional differences in educational environments.
2. CUES had greater score reliability.
3. CUES had scores that could be related to somewhat more reliable normative data.

A rather unique article appeared in 1965. Written by Dyer (1965:318-321) its major concern was with the problem of adequately describing colleges so that this information would be useful to prospective students, thereby decreasing dropout and misplacement problems among college students. He suggested that the beginnings on the measurement of "institutional climates" to be found in applying Pace's CUES were starts on the problem of describing colleges so that applicants would have a better idea of the nature of colleges they might be attending.

A number of studies in the last four years seemed to indicate that CUES in its first edition had been used in a variety of situations (Bagley, 1969; Gelso and Sims, 1968; Voda, 1969; Wilson, 1969; and Berdie, 1967). Bagley's work was done in four colleges in New York State. Using CUES he hoped to gain a general assessment of student characteristics for inclusion in a data bank. The assessment included perceptions by entering freshmen and other representative groups of students and faculty. The general finding was a descent in scale scores the longer a group had been within the college, reaching what Bagley called "a plateau of reality".

The Gelso and Sims study was designed to determine if differences in perception existed between commuting students, resident students, and faculty in a junior college. All participants had been at the college at least one quarter prior to the study. The normal scoring technique of CUES did not lend itself to inter-group comparisons so the individual scoring technique recommended by Pace for CUES, first edition, and used by Berdie (1967) was employed. Using confidence

levels and comparison of scores with Pace's norming information, differences were concluded to exist. The authors concluded that:

. . . the results of this investigation, . . . appear to indicate that a person's location and position in an institution significantly affect some of his perceptions of the characteristics of that institution.
(Gelso and Sims, 1968:43)

A further study using CUES was carried out by Wilson (1969) when he compared vocational and transfer students, vocational and transfer faculty, and administration. Drawing samples of 50 students and using all faculty and administrators, cross comparisons were made among all groups. The alternative scoring method, recommended by Pace and used by Berdie (1967), was used to arrive at individual scores. A considerable number of significant differences emerged throughout all the groups on many of the scale scores. The findings were recommended for use as a base point in starting dialogue to analyze the perceived differences. The information was also recommended for use by high school students to aid them in best choosing the college which would meet their needs.

The work done by Berdie (1967:55-66) and alluded to previously found its main significance in the methods used by the author to score and analyze CUES. The instrument was administered to a sample of 1,591 students. Scoring was carried out by using Pace's 66 percent plus method and it was also done in the more customary psychometric manner whereby the number of items on each scale responded to in the keyed direction provided the basis for individual scores on the five scales. A comparison was made of the two scoring methods. A number of tests of reliability (odd-even, Kuder-Richardson, test-retest) were also

applied and compared with Pace's split half reliability measure. Berdie concluded that the reliability coefficients suggested CUES scores do not present reliable information about individuals, although the data were satisfactory for making group comparisons.

In his final comment Berdie indicated that analyses of CUES suggested interpretation of results reported in various studies depended, at least in part, on the method of scoring used.

A very worthwhile article (Mitchell, 1969) reviewed a great deal of the person-environment interaction literature. The author pointed out two methodological problems which applied to CUES.

1. Student perceptions may be influenced and distorted by their own personality characteristics.

2. Colleges with certain environmental press characteristics could tend to attract students whose need patterns were personalized versions of the press.

Basically Mitchell pointed out the need to take into account factors of student variance attributable to student input characteristics before certain student behaviors were attributed to the effects of college environment.

A recent article by Feldman (1971) did an excellent summary of the work in the measurement of college environments. This article was rather important because Feldman extensively developed the possible use of the critical path method as a solution for some of the methodological problems associated with environmental studies.

Finally, very recent summary work by two of the key figures in the need-press approach to environmental analysis should be mentioned.

The one work by Stern (1970) has been referred to already. It is a summary of Stern's past, present, and on-going activities. The other work by Pace (1969a) has not yet been mentioned but anyone contemplating work in environmental analysis should look at the article for it presents Pace's rather different approach. Up to this point no literature was found which reported use of CUES-II.

SUMMARY OF THE CHAPTER

Chapter three traced the development of actual instruments and efforts to actualize the person-environment interaction. Earliest efforts revolved around the development of the CCI and the AI as parallel measures of environment and personality. These two instruments grew out of work done by Stern, Stein, and Bloom in some of the earliest efforts to assess personality in terms of environmental press.

Following the development of the AI by Stern and the CCI by Stern and Pace the instruments were used in a wide variety of situations. Many of these studies using the CCI had some influence on the development of a new instrument, the CUES. As a result of these influences and his own work, Pace developed the CUES, an instrument which concentrated on discriminating between different college environments. The first edition of the CUES was widely used by Pace and others. The considerable amount of information produced by Pace's work in particular led to a revision of the first edition and in 1969 CUES-II was introduced.

The wide use of all these "environment" instruments pointed to a variety of different perceptions of the same college environments

by groups within the colleges. Faculty groups tended to perceive at higher levels than did students and different groups of students also tended to receive different scores. A number of reviews of the literature related to environment studies also offered some very interesting and effective criticism of these environment studies. Major criticisms noted the need for independent measures of student and environment characteristics. An additional criticism also indicated the need for further research to ensure that instruments actually did measure the person-environment interaction.

Chapter 4

RESEARCH PROCEDURES

The research undertaken for this study is described in this chapter. The first major section deals with a brief review of the history and pertinent characteristics of the instrument. Following sections deal with the collection of the data (sample and response) and treatment of the data.

THE INSTRUMENT

Introduction

The instrument used in this study was the College and University Environment Scales: Form X-2 (CUES II) developed by Pace (1969) and modified. Three things must be kept in mind about CUES II.

1. It is an opinion poll. Percentage agreement or disagreement is the common way of reporting such a poll.
2. The instrument defined characteristic at a level greater than 50 percent.
3. A scale score was derived by the number of statements judged as characteristic of the environment, with characteristic defined as a level of consensus of at least two-to-one or greater.
4. CUES also required that respondents be in a college for at least a year to qualify them as reporters of the environment.

Development

The first instrument in the CUES tradition was the College Characteristics Index (CCI) developed by Pace and Stern (1958). It was intended for parallel use with a personality test, the Stern Activities Index (AI). These two instruments failed since the dimensions along which environments differed from one another were not the same as the dimensions along which individuals differed from one another. Also a large number of items in the CCI were nonfunctional since they failed to differentiate between various college environments.

In 1963 the CUES was published and it consisted of 150 items from the CCI, selected because of their ability to discriminate between environments. These items were organized into five scales which emerged from a factor analysis of fifty colleges and universities. Thus the CUES scales arose from differences between educational environments and not as the result of some presumed parallelism between student needs and environmental demands.

Reasons for the production of CUES II were threefold.

1. The first CUES had been so widely used it was possible to develop new norms. A group of 100 institutions with 15,345 students was used.

2. Some items were suspected to be better than others and revision was desired.

The CUES II consisted of five scales using 100 of the original 150 items and including 60 trial items. The 100 items formed seven scales: five of twenty items each, one subscale of eleven items, and one subscale of 22 items.

In revising the first CUES to obtain the best items for CUES II the following statistical criteria were satisfied:

1. The retained items had an item-scale score correlation of 0.40 or higher, (Pace, 1969b:36,38);
2. The retained items had a higher correlation with the score for the scale in which they were located than with any other scale score, (Pace, 1969b:36-37);
3. The average percentage agreeing with the keyed response throughout the sample of 100 colleges was at least ten percent and no higher than 90 percent. Each item described neither too rare nor too common a characteristic of the environment, (Pace, 1969b:37);
4. There should be a standard deviation for the distribution of item percentages agreeing with the keyed response of at least ten points, and preferably fifteen points or more. All but three of the 100 retained items satisfied this minimum requirement, (Pace, 1969b:37); and
5. The final step was to factor analyze the twenty-item scales to ascertain whether the five scales successfully emerged as factors corresponding to the items in the respective scales. The scale of Practicality failed to come factorally clean, however, it consisted of items which correlated 0.50 or more with the Practicality score. All other scales had items which factor loaded at 0.40 or higher (Pace, 1969b:36, 40-41).

Work done by Robinson and Seligman (1968) also made it possible to recombine certain of the basic 100 questions into an additional subscale, Campus Morale. No documentation of the Quality of Teaching and Faculty-student Relationships subscale was found.

Scale Definitions

At this juncture it should be helpful to give Pace's definition of the five variable scales and the two subscales used to define the environment.

Scale 1. Practicality. The 20 items that contribute to the score for this scale describe an environment characterized by enterprise, organization, material benefits, and social activities. There are both vocational and collegiate emphases. A kind of orderly supervision is evident in the administration and the classwork. As in many organized societies there is also some personal benefit and prestige to be obtained by operating in the system - knowing the right people, being in the right clubs, becoming a leader, respecting one's superiors, and so forth. The environment, though structured, is not repressive because it responds to entrepreneurial activities and is generally characterized by good fun and school spirit.

Scale 2. Community. The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. The atmosphere is congenial; the campus is a community. Faculty members know the students, are interested in their problems, and go out of their way to be helpful. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

Scale 3. Awareness. The items in this scale seem to reflect a concern about the emphasis upon three sorts of meaning - personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and future condition of man suggests the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness, an awareness of self, of society, and of aesthetic stimuli. Along with this push toward expansion, and perhaps as a necessary condition for it, there is an encouragement of questioning and dissent and a tolerance of nonconformity and personal expressiveness.

Scale 4. Propriety. These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative,

risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

Scale 5. Scholarship. The items in this scale describe an environment characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas, knowledge for its own sake, and intellectual discipline - all these are characteristic of the environment.

Subscale 1. Campus Morale. The items in this scale describe an environment characterized by acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and at the same time, a commitment to intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

Subscale 2. Quality of Teaching and Faculty-student Relationships. This scale defines an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest, and helpfulness toward students.
(Pace, 1969b:11)

Scoring

Scale and subscale scores were derived in three steps.

1. Add the number of items answered by 67 percent or more of the students in the "correct" (as defined by scale definitions and arbitrarily set in the key) direction.

2. Subtract the number of items answered by 33 percent or fewer of the students in the "correct" direction.

3. Add a constant equal to the number of items in the particular scale or subscale to eliminate negatives.

Reliability

Based on Cronbach's (1951:297-334) coefficient alpha, the reliability of CUES scores as measures of institutional differences ranged from 0.89 to 0.94. The standard errors of the mean score for each of the five scales were 0.74, 0.76, 0.87, 0.69, and 0.82. The unbiased true mean was within 1.5 points of the obtained mean of the various scales.

The reliability of a single score at a single institution was a different matter. CUES scores were based on the logic of consensus, not the logic of variance. Thus to establish the reliability of its score an institution must have an estimate of the stability of its own consensus. This was a function of two conditions: (1) the size of the sample, and (2) the number of items falling close to the 67/33 borderline of being or not being counted in the score. Clearly then what happened to a score depended on how many items there were to which the percentage responding in the keyed direction was close to 67 or to 33. Based on sampling error, probabilities of percentages shifting were derived by Pace (1969b:44). The number of percentages close to 67 or to 33 would give some indication of how much the true score could vary from the obtained score.

Possibly the best evidence of reliability was test-retest comparisons made at 25 institutions. With the five scales a possible 125 comparisons arose, and of these, 80 percent differed by three points or less, and 90 percent differed by four points or less.

(Pace, 1969b:43-45)

Validity

The validity data basically consisted of correlations between CUES scores and the various characteristics of students and institutions as measured on the Scholastic Aptitude Test, and the National Merit Qualifying Test. An input factor labelled "intellectuality" was also available for all 100 schools in the norm group. Finally data from the 1961 National Opinion Research Centre yielded information for 63 of the schools about students in the top ten percent of high school classes.

The correlations resulting supplied positive answers to the following three questions:

1. To what extent are characteristics of students, programs, and campus atmosphere generally congruent with one another?
2. To what extent are the attitudes and behaviors of students generally congruent with the atmosphere of their campus?
3. To what extent are the dimensions of college environment, identified by different studies and different methods, generally similar to those identified by CUES?

The variables measured by the Environmental Assessment Technique of Astin (1961) correlated in the 0.30's and 0.40's with CUES. In general, scores on CUES correlated with other relevant variables to the same degree as scores on the Scholastic Aptitude Test correlated with college grades - from the low 0.30's to the high 0.60's.

COLLECTION OF THE DATA

The data were originally to have been collected in five public colleges in Alberta. Only four agreed to participate and the following section describes the sampling techniques used and the following response.

The Sample

According to Pace's (1969b:12) recommendations a sample size of 50 was deemed to be adequate for all of the student populations being polled. Due to the size of faculties and administrations it was decided to request participation from all of these individuals. Originally the instrument was to be taken into each college and administered to the various groups. This became impractical in two of the colleges due to college size and problems in gathering the specified persons together at the same time. Consequently the instrument was mailed to Colleges B and C. Colleges A and D were visited personally and the procedures are described below.

College A. This college was visited and the following techniques were used. Student lists including the courses being taken by individual students were obtained. All students taking three or more courses were chosen. This list of full-time students was then numbered and a table of random numbers was used to draw a sample of 50 individuals. A number of alternates was also drawn in the event that absenteeism or failure to participate seriously affected the involvement of the original 50 students. Having thus arrived at the student sample,

timetables were consulted and the individual students were approached and their participation was requested.

The same technique had been planned for the second-year students at College A but very few were enrolled who fulfilled the requirements of the instrument. Consequently all second-year students who had been at the college for more than a year were requested to participate.

A request for administrative participation was made at the regular meeting of the administrative staff. The instrument was distributed to the faculty through their mailboxes. The response was very poor due to an earlier misunderstanding related to distribution and was also due to the fact that the staff had been deluged with requests for participation in additional studies. A final request for participation was sent to each individual staff member.

College B. This college was considered too large to allow for contact with groups of individuals. As a result the following sampling and mailing techniques were used. Questionnaires were mailed to randomly selected groups of first and second-year students after student union approval had been obtained. Samples of 50 students each in first and second-years were desired, however questionnaires were sent to 100 first and 100 second-year students in an attempt to insure that an adequate return would yield close to the recommended sample size of 50 participants in each student group. The student union telephone directory was assumed to include close to 100 percent of the student body and it was used to draw the random sample. Students in first and second-year were numbered and a table of random numbers was used to draw the sample.

The president of the faculty association was contacted and he agreed to distribute the questionnaires to individual faculty members. This occurred after the faculty association had considered and approved a request for participation in the study. Faculty returns were given to the president of the staff association and were held for personal pick-up by the researcher. At this time those staff members who had not returned questionnaires were visited personally in an attempt to augment a low original return. Distribution of returns to the administrative staff was carried out by the president of the college.

College C. Arrangements similar to College B were made in this college. Some additional comments should be made however since some problems arose.

The student union telephone directory was used to prepare original lists of first and second-year students. These lists were numbered and a random table was used to draw a sample of 100 first and 100 second-year students. Directory information on second-year status of students was not accurate. This meant that some of the second-year sample were actually first-year students. The result was a low second-year return. The final result was that the sample of students in this college could not be purely termed random. At best it would be correct to classify the samples of first and second-year students as stratified, random samples, since the directory did not contain all students on campus.

The faculty association at this college was contacted and approved participation in the study. On this basis a bundle of questionnaires with individual covering letters was sent to the

president of the faculty association for distribution.

The president of the college had also agreed to distribute questionnaires with individual letters of explanation and request to each of the administrative staff.

College D. Arrangements very similar to College A were made in this college. A personal visit was made to the college and working from student lists all students taking three or more courses were determined. In first-year these students were numbered and a table of random numbers was used to draw a sample of 50 students and alternates. The class of second-year students taking three or more courses was less than 50 so the entire population was used. Time-tables were employed and individual students were approached in various classes and their participation was requested.

Questionnaires for the faculty were distributed with a covering letter of explanation and request. The president of the faculty association also included a letter of request and arranged time for the faculty to meet and ask questions of the researcher. No one attended the meeting but the return of questionnaires was reasonably good and considerable discussion took place with individual faculty members.

The president of the college agreed to distribute the questionnaires to his administrative staff.

The Response

Colleges A and D. Since selection of the student samples in College A was based on information which gave the total number of individuals taking three or more courses, the response was reported in

terms of these total figures. The sample of first-year students from whom usable responses were received numbered 41. They represented 15.8 percent of the total of 258 possible respondents. Only four students in Year Two met the qualifications of the instrument. The other four second-year students had been granted advanced standing and as a result had not been in the college for one year or more. This information on first and second-year student response in College A was summarized in Table 1 along with the same information for College D, since sampling techniques were similar in both colleges.

In College D a sample of 50 students was drawn from 216 first-year students who were taking three or more courses. Fifty responses (23.2%) were received and all were used. The total second-year population taking three or more courses was 40. All of these students were included and 27 responses (67.5%) were received and used. First and second-year student response in College D was summarized in Table 1.

Information on faculty and administrative response was reported in the same manner. In College A six of 23 faculty members responded, and five of these responses were usable. These figures represented 26.0 percent and 21.7 percent respectively of the total staff. All six of the administrators responded and all of these responses were used. Combining the faculty and the administrators made a total of 28 possible responses. Twelve responses (41.3%) were received and 11 (37.9%) were usable.

In College D there were 28 faculty members and four administrators. Nineteen responses (67.9%) were received from the faculty and 15 (53.6%) were used. All four of the administrators

Table 1

The Numbers and Percentages of Actual Student Responses in Colleges
A and D Compared with Totals Taking Three or More Courses

	<u>Responses received</u>		<u>N used</u>		<u>Total 3+ population</u>
	f	%f	f	%f	N
COLLEGE A					
Year 1	41	15.8%	41	15.8%	258
Year 2	4	100.0%	4	100.0%	4
COLLEGE D					
Year 1	50	23.2%	50	23.2%	216
Year 2	27	67.5%	27	67.5%	40

responded and their responses were used. Combination of the faculty with the administrators resulted in 23 responses (71.7%) from a total of 32. Nineteen (59.4%) of these were used. Faculty and administration response for Colleges A and D was summarized in Table 2 due to similar methods of data collection in each college.

Another way of examining the response in these two colleges was to look at the number and percent of actual item response for each group as compared to the total possible item response. Each individual represented a possible of 100 items.

First-year students in College A had an actual item response of 3,991 (97.3%) out of a total possible of 4,100. Second-year students had an actual response of 390 (97.5%) out of a possible 400. The faculty and administrators combined in College A answered 1,042 (94.7%) out of a possible 1,100 items.

In College D first-year students had an actual response of 4,963 (99.3%) out of a total possible of 5,000. Second-year students had an actual response of 2,665 (98.7%) out of a total possible of 2,700. Faculty and administrators combined in College D had an actual response of 1,858 (97.8%) out of a total possible of 1,900. Actual response compared with possible response in Colleges A and D was summarized in Table 3 along with Colleges B and C.

College B. Sampling techniques were different in this college since no information was available on which specific students were taking three or more courses. The response was reported by showing the number and percentage of actual respondents compared with the population sample and the total population. One hundred first-year

Table 2

The Numbers and Percentages of Actual Response from Faculty and Administrators
in Colleges A and D Compared with Total Figures

	<u>Responses received</u>		<u>N used</u>		<u>Total Population</u>
	f	%f	f	%f	N
COLLEGE A					
Faculty	6	26.0%	5	21.7%	23
Administrators	6	100.0%	6	100.0%	6
Faculty and Administrators	12	41.3%	11	37.9%	29
COLLEGE D					
Faculty	19	67.9%	15	53.6%	28
Administrators	4	100.0%	4	100.0%	4
Faculty and Administrators	23	71.9%	19	59.4%	32

students were sent questionnaires and 57 responses were received with 54 being usable. The total population of first-year students used for sampling was 533. Similarly 100 second-year students were polled and 59 responses were received with 57 being usable. The total population of second-year students was 254. It was later learned that in February, 1971 the number of students taking three or more courses was 736. This represented 96.7 percent of the student body.

All 52 of the faculty were given questionnaires and 30 (57.7%) were returned with 27 (51.9%) being used. All of the administrators replied with usable responses. The faculty and the administrators combined represented a total of 56 potential respondents. From this group 34 responses (60.7%) were received and 31 (55.4%) were used. The above information on student, faculty, and administrator response in College B was summarized in Table 4 along with the same data for College C since collection methods were similar.

The comparison of actual items answered with total item response possible in College B resulted in 5,380 items (99.6%) answered from the first-year total of 5,400. Second-year students answered 5,675 items (99.6%) out of a total of 5,700. The faculty and administrators combined answered 2,975 items (96.0%) out of a possible 3,100 items. A summary of the item response in College B was included in Table 3 along with similar information for the other colleges.

College C. The response in this college was reported in the same manner as College B. One hundred first-year students were sent questionnaires and 55 responses were received and used. The total population of first-year students used for sampling was 338. Similarly

100 second-year students were sent questionnaires and 24 responses were received and used. The total population of second-year students used for sampling was 480. Total registration of students taking three or more courses at April, 1971 was 1,470. This represented 50.1 percent of the total student population.

A misinterpretation of the full-time personal data question occurred at this college and more than 75 percent of the students indicated they were only part-time. As a result it was assumed that the source of student names, the student telephone directory, would tend to contain a majority of full-time students. Thus the total complement of responses was used. This move was further supported by the range of different students in the two groups. This is discussed in the following chapter.

There were 107 faculty in College C and 64 (59.8%) sent responses. Fifty-nine (55.1%) of these responses were usable. From these 59 faculty responses, 46 (43.0%) had been in the college for more than a year and 13 (12.2%) had been teaching for less than a year. Questionnaires were sent to nine administrators and seven (77.8%) responded; all seven were usable. Combining administrators with faculty who had been in the college for more than a year resulted in a total of 116 responses, from which 59 (50.9%) were received and used. The information on student, faculty, and administrator response was summarized in Table 4.

The comparison of items answered with total items possible in College C resulted in 5,465 items (99.4%) answered from the first-year total possible of 5,500. The second-year students answered 2,396 (99.8%) out of a total of 2,400 items. Faculty on campus for less

than a year replied to 1,248 (96.0%) out of a total of 1,300, and the actual responses for faculty on campus for more than a year was 4,101 (89.2%) out of a total of 4,600. The administrators responded to 668 (95.4%) out of a total of 700 items. Combining the administrators and faculty in the college for more than a year gave an actual item response of 4,769 (90.0%) out of a total possible of 5,300. This information on actual items answered for College C was summarized in Table 3 along with the same information for all other colleges.

TREATMENT OF THE DATA

General

When the responses to the CUES first came in, some of the groups were too small to make adequate discriminations. This was obvious when one realized that the derivation of group scores was based on 67 percent plus agreement. With groups of four the possibilities of getting the 67 percent were too unrealistic. Consequently the results from administrator responses were combined with those of the staff. Presentation of the administrators' responses was given separately with College C. In College A the group of second-year students was too small and they were combined with the first-year students.

In College C a sufficient number of faculty who had been in the college for less than a year responded thus making it possible to compute their responses as a group. Consequently in College C this group of teachers was presented for additional information.

Part-time faculty were not used in tabulating the results since they were not likely to have become aware of the overall

Table 3

The Numbers and Percentages of the 100 Items Answered by Each Individual Compared with the Total Number of Items Possible

	Total items possible N x 100 = Total N possible	Total no. of items answered f	%f
COLLEGE A			
Students - year 1	41 x 100 = 4,100	3,991	97.3
Students - year 2	4 x 100 = 400	390	97.5
Faculty and Administrators	11 x 100 = 1,100	1,042	94.7
COLLEGE B			
Students - year 1	54 x 100 = 5,400	5,380	99.6
Students - year 2	57 x 100 = 5,700	5,675	99.6
Faculty and Administrators	31 x 100 = 3,100	2,975	96.0
COLLEGE C			
Students - year 1	55 x 100 = 5,500	5,465	99.4
Students - year 2	24 x 100 = 2,400	2,396	99.8
Faculty - less 1 year	13 x 100 = 1,300	1,248	96.0
Faculty - more 1 year	46 x 100 = 4,600	4,101	89.2
Administrators	7 x 100 = 700	668	95.4
Faculty (+ 1 year) and Administrators	53 x 100 = 5,300	4,769	90.0
COLLEGE D			
Students - year 1	50 x 100 = 5,000	4,963	99.3
Students - year 2	27 x 100 = 2,700	2,665	98.7
Faculty and Administrators	19 x 100 = 1,900	1,858	97.8

Table 4

The Numbers and Percentages of Actual Respondents in Colleges B and C Compared
with the Population Sample and with the Population Used To Draw the Sample

	Responses received		N used		Total sample size		Population used	
	f	%f	f	%f	f	%f	f	%f
COLLEGE B								
Students - year 1	57	57.0	54	54.0	100	100.0	533*	
Students - year 2	59	59.0	57	57.0	100	100.0	254*	
Faculty	30	57.7	27	51.9	52	100.0	52**	
Administrators	4	100.0	4	100.0	4	100.0	4**	
Faculty and Administrators	34	60.7	31	55.4	56	100.0	56	
*Total registration of students in 3 or more courses at February, 1971 was 736 out of 761								
COLLEGE C								
Students - year 1	55	55.0	55	55.0	100	100.0	338*	
Students - year 2	24	24.0	24	24.0	100	100.0	480*	
Faculty	64	59.8	59	55.1	107	100.0	107**	
- less 1 year	13	12.2	13	12.2	107	100.0	107**	
- more 1 year	46	43.0	46	43.0	107	100.0	107**	
Administrators	7	77.8	7	77.8	9	100.0	9**	
Faculty (1 year +) and Administrators	59	50.9	59	50.9	116	100.0	116**	

*Total registration in all programs of students taking 3 or more courses at April, 1971 was 1,470 out of 2,932.

**Total populations.

environment. This general rule was overridden where the staff member indicated activity within the college for a period of two years or more. After this amount of time in the college, even though on a part-time basis, the staff member would likely have had an adequate basis to perceive the environment.

Two methods of computing the scores were used. The first method was that described earlier in this chapter (see above p. 48). This was the method recommended by Pace (1969b:13).

The second method was more akin to normal psychometric treatment of questionnaire responses whereby individual scores on each scale were arrived at by scoring each person with a plus for each correct response and with a negative for a wrong or zero response. In this manner it was possible to determine individual scores and, by averaging, to determine group scores. Unlike the first method, this second method allowed between-group comparisons.

This second scoring method was similar to techniques used by Berdie (1967) and Wilson (1969) in their analysis of CUES responses. However they used the first edition of CUES which was scored by totaling only items which had 67 percent or more respondents with a "correct" response to the item. The second edition of CUES used in this study continued with the 67 percent scoring method but also added a minus factor when 33 percent or less obtained "correct" responses. Thus if an individual score was to be possible a negative factor had to be introduced. This accounted for the negative factor attributed to wrong or zero responses. While not totally consistent with the group scoring logic of CUES-II, the method provided another comparison.

Method One

The scale scores derived in this manner were tabulated according to groups and presented so that gross differences would be apparent.

One concern with an opinion poll type of questionnaire was with the stability of the consensus. Consequently a number of examinations of the results was made. The techniques followed the criteria used by Pace when he retained items from the first edition of CUES for inclusion in CUES-II (see above p. 46). These examinations are indicated.

1. The percentage response to each item was examined to determine how many items failed to meet the requirement that the average percentage agreeing with the keyed response throughout the colleges should be at least ten percent and no higher than 90 percent.

2. A further examination was made to determine whether the standard deviation of the distribution of item percentages agreeing with the keyed response was above ten.

3. An analysis of the percentage of items agreeing with the keyed response within the groups in each college was made to determine what the probability was that the percentages could shift up or down. Based on Pace's (1969b:44) probability tables, this analysis gave some insight into the stability of each college's consensus by indicating the odds that particular items would have of being included or excluded from a score. This analysis was only done to items retained after deletion of poorly discriminating items.

4. An examination of all items was made to determine how many items had received a zero response. This analysis in conjunction with

numbers one and two above were used to delete items which did not discriminate between environmental differences.

All scores reported were derived after excluding the deleted items. CUES scores using method one but including the poor items were included in Appendix D.

Method Two

This method dealt with individual scores. The means and standard deviations of individual scores were presented and the t test for independent sample means was used to isolate between-group differences.

SUMMARY OF THE CHAPTER

Scores in CUES-II were derived through the use of an opinion-poll technique in which the percentages of "correct" responses for specific individual test items were combined into a scale score. Any item that had 67 percent or more of the respondents giving the "correct" answer scored as a plus. Items on which 33 percent or less of the respondents were "correct" scored as a minus. The pluses and minuses were combined and a constant, equal to the number of items used in the scale score, was added to yield scores on seven scales. Thus the CUES' scores represented a "consensus" defined at a level of agreement of two-to-one or greater.

The reliability data of CUES-II came from experience with the instrument in over 100 colleges and universities. Due to the different scoring method of the CUES, reliability had to be based on the logic of consensus and not the logic of variance. Thus reliability in the CUES

was a measure of the stability of the "consensus" defined in the scoring technique. Data based on comparisons with other instruments and correlation with other variables showed reasonable validity.

Data came from two collection methods. One method used random samples of first and second-year students, all faculty, and all administrators. These data were collected by mail from two colleges. The second method employed personal visits to another two colleges for data collection from the similar groups.

The original scoring method yielded an item analysis which allowed for the deletion of poorly discriminating items. Rescoring of the tests by different methods produced two sets of scores. The first scoring method was the normal opinion-poll technique for the CUES. This method produced group scores and allowed only group comparisons. The second method produced individual scores which were averaged to produce group scores thus allowing for between-group comparisons with the t test for independent sample means.

Chapter 5

RESEARCH FINDINGS

Chapter 5 includes a description of the findings in the study. The chapter is divided into four major sections. The first section describes the characteristics of the sample in each college according to age, sex, and program distributions. Section two reveals the findings of an initial item analysis after the first scoring by method one. Since the responses in this study were scored in two different ways, the third and fourth sections of this chapter present the respective results for each method. The findings for method one are presented by groups in each college. The results for each college treated as a whole are also given. The findings for method two are presented in a similar fashion except that between-group comparisons were made with the t test.

DESCRIPTION OF THE SAMPLE

Distribution of Respondents by Age

The age data for the samples in each college were collapsed into five categories, with an additional category added for "no reply". The categories were from 15 to 19 years, 20 to 24 years, 25 to 29 years, 30 to 34 years, and 35 years and over. The information under each category was presented in frequencies and percentage frequencies. The age data for all the colleges were summarized into Table 5 at the end of this sub-division on age.

College A. The sample of first-year students in this college was 41. Nineteen (46.3%) of this sample were in the 15 to 19 year old category. Nine students (21.9%) were in the 20 to 25 year old group and four (9.8%) were in the 25 to 29 year old category. There were no students in the 30 to 34 year old group but four (9.8%) students were 35 years of age or older. Five students (12.2%) did not respond.

From the four second-year students, two (50.0%) were in the 20 to 24 year old category and two (50.0%) were in the 25 to 29 year old group.

The eleven faculty and administrators were not represented in the age groups which ranged from 15 to 24 years of age. Two (18.2%) of the faculty and administrators were in the 25 to 29 year old group and three (27.3%) were in the 30 to 34 year old category. Two (18.2%) indicated they were 35 years or older and four (36.4%) did not reply.

The students in College A tended to be in the first two age categories, although the 9.8 percent of the first-year sample in the 35 years or older category was interesting. The difficulty of characterizing the faculty by age was increased by the small response and by the relatively significant percentage (36.4%) who gave no reply. However 45.5 percent of the faculty that responded were 25 to 34 years of age.

College B. In College B a sample of 54 first-year students was used. From this total, 35 students (64.8%) were in the 15 to 19 year old group. The second category from 20 to 24 years of age contained 15 individuals (27.7%). Only one student (1.9%) was in

the age range from 25 to 29 years of age. No one was in the 30 to 34 year old category and one student (1.9%) was 35 years of age or older. Two first-year students (3.7%) did not respond to the age question.

The total sample of second-year students in College B was 57. Of these students, 22 (38.6%) were in the fifteen to nineteen year old group and 28 (49.1%) were in the 20 to 24 year old range. One student (1.8%) each was in the categories of 25 to 29 years of age and 30 to 34 years of age. Three students (5.3%) indicated that they were 35 years or older and two individuals (3.5%) did not answer the age question.

The faculty and administrators in College B made up a sample of 31. None of these 31 appeared in the first two age categories. Five (16.1%) were in the 25 to 29 year old range and eight (25.8%) were in the 30 to 34 year old range. Nine (29.0%) were 35 years of age or older and nine (29.0%) did not give an age response.

The students in College B also tended to be in the first two age categories. Of the first-year students 92.5 percent were fifteen to 24 years of age. The relatively low number of students in the older categories was of interest. The difficulty in characterizing the faculty was again compounded by 29 percent who did not respond. The staff who did respond tended to be somewhat older with 54.8 percent 30 years of age or older.

College C. The number of first-year students in the sample at College C was 55. The number of these students in the age category from fifteen to nineteen years of age was 26 (47.3%) and 22 (40.0%) were in the 20 to 24 year old group. One student (1.8%) was in the 25 to 29 year old category and three (5.5%) were in the 30 to 34 year old

range. One (1.8%) was 35 years or older and two individuals (3.6%) gave no age response.

The sample of second-year students in College C was 24. Five of these students (20.8%) were in the fifteen to nineteen year old category, while thirteen (54.2%) were in the 20 to 24 year old range. Two second-year students (8.3%) were in the 25 to 29 year old group and one (4.2%) was in the 30 to 34 year old range. Two (8.3%) indicated that they were 35 years or older and one (4.2%) gave no age information.

The sample of faculty in the college for less than a year was thirteen. None of these individuals were in the first two age categories. Four (30.7%) of them were in the 25 to 29 year old range. The remaining three categories, 30 to 34 years of age, 35 years and older, and no reply each contained three individuals (23.1%).

Faculty members in the college for more than one year made up a sample of 46 people. None of these people were in the fifteen to nineteen year old group. One person (2.1%) was in the 20 to 24 year old range and nine (19.6%) were in the 25 to 29 year old category. Twelve (26.1%) were in the 30 to 34 year old cluster and eleven (23.9%) indicated that they were 35 years of age or older. Thirteen (28.3%) gave no response.

Combining the 46 faculty in the college for more than a year with the seven administrators gave another sample of 53 persons. From this group no one was in the fifteen to nineteen year old category. One person (1.9%) was in the 20 to 24 year old range and eleven (20.8%) were in the 25 to 29 year old category. Thirteen people

(20.8%) responded that they were in the 30 to 34 year old range and fifteen individuals (28.3%) were 35 years of age or older. Thirteen (24.5%) gave no response.

Students tended to be in the first two categories in this college also. The increase in the number of older students was notable with 10.1 percent of the first-year sample 25 years or older and 20.8 percent of the second-year sample 25 years or older. Faculty members on campus for less than a year tended to be younger than those on campus for more than a year. With the former group having 53.8 percent 25 to 34 years of age and the latter group having 45.7 percent in the same age range. A rather large percentage of faculty did not respond to the age question and as a result much specific comment was ruled out.

College D The sample of first-year students in College D was made up of 50 individuals. Twenty-seven of these students (54.0%) were in the fifteen to nineteen year old category, while eleven (22.8%) were in the 20 to 24 year old category. Two first-year students (4.0%) were in the 25 to 29 year old group and one (2.0%) was in the 30 to 34 year old range. Four of these students (8.0%) were 35 years of age or older and five (10.0%) gave no response.

The sample of second-year students was 27. Of this number, six (22.2%) were fifteen to nineteen years of age and fourteen (51.9%) were 20 to 24 years of age. Three students (11.1%) were in the 25 to 29 year old range. One student (3.7%) each was in the 30 to 34 year old category and in the 35 years of age or older group. Two students (7.4%) gave no response.

Table 5

Distribution of Respondents Used in All Colleges by Number
and Percentage According to Age Category

	Age							Total
	15 - 19	20 - 24	25 29	30 - 34	35 and over	No reply		
	f %f	f %f	f %f	f %f	f %f	f %f		
COLLEGE A								
Students - year 1	19 46.3	9 21.9	4 9.8	0 0.0	4 9.8	5 12.2	41 100.0	
Students - year 2	0 0.0	2 50.0	2 50.0	0 0.0	0 0.0	0 0.0	4 100.0	
Faculty and Administrators	0 0.0	0 0.0	2 18.2	3 27.3	2 18.2	4 36.4	11 100.0	
COLLEGE B								
Students - year 1	35 64.8	15 27.7	1 1.9	0 0.0	1 1.9	2 3.7	54 100.0	
Students - year 2	22 38.6	28 49.1	1 1.8	1 1.8	3 5.3	2 3.5	57 100.0	
Faculty and Administrators	0 0.0	0 0.0	5 16.1	8 25.8	9 29.3	9 29.3	31 100.0	

Table 5 (continued)

	Age						
	15 - 19	20 - 24	25 - 29	30 - 34	35 and over	No reply	Total
	f %f	f %f	f %f	f %f	f %f	f %f	f %f
COLLEGE C							
Students - year 1	26 47.3	22 40.0	1 1.8	3 5.5	1 1.8	2 3.6	55 100.0
Students - year 2	5 20.8	13 54.2	2 8.3	1 4.2	2 8.3	1 4.2	24 100.0
Faculty - less 1 year	0 0.0	0 0.0	4 30.7	3 23.1	3 23.1	3 23.1	13 100.0
- more 1 year	0 0.0	1 2.1	9 19.6	12 26.1	11 23.9	13 28.3	46 100.0
Faculty (+1 yr.) and Administrators	0 0.0	1 1.9	11 20.8	13 24.5	15 28.3	13 24.5	53 100.0
COLLEGE D							
Students - year 1	27 54.0	11 22.8	2 4.0	1 2.0	4 8.0	5 10.0	50 100.0
Students - year 2	6 22.2	14 51.9	3 11.1	1 3.7	1 3.7	2 7.4	27 100.0
Faculty and Administrators	0 0.0	1 5.2	2 10.5	5 26.3	8 42.1	3 15.8	19 100.0

The faculty and administrators combined made a sample of nineteen individuals. None of these people were in the fifteen to nineteen year old category. One person (5.2%) was 20 to 24 years of age and two individuals (10.5%) were in the 25 to 29 year old category. Five persons (26.3%) were 30 to 34 years of age and eight (42.1%) were 35 years of age or older. Three individuals (15.8%) gave no response.

Both first and second-year students had approximately 75 percent of the respective sample in the first two age categories. Fourteen percent of the first-year students were 25 years of age or older and 18.5 percent of the second-year students were in the same category. The staff tended to be somewhat older with 42.1 percent 35 years of age or older. Failure of some individuals in all groups to respond to the age question made more exact comment difficult.

Distribution of Respondents by Sex

The distribution of respondents by sex for all colleges was summarized into Table 6 at the end of this chapter sub-division on distribution by sex.

College A. The sample of first-year students had fourteen males (34.2%), 25 females (60.9%), and two individuals (4.9%) who did not reply. The total sample consisted of 41 responses. The second-year sample of four students was evenly divided. The combined group of faculty and administrators had a total of 11 responses. Of this number eight (72.7%) were males, one (9.1%) was a female, and two (18.2%) did not respond.

College B. The first-year sample in College B totaled 54. Twenty-four (44.4%) of these students were male and 30 (55.6%) were female. All students in the sample replied to this question. The sample size for the second-year students was 57, from which 25 (43.9%) were males and 32 (56.1%) were females. The faculty and administrators combined for a total of 31 responses. Twenty-two (70.9%) of these responses were male and six (19.4%) were female. Three individuals (9.7%) did not respond.

College C. In College C the sample of 55 first-year students had 34 males (61.8%) and 21 females (38.2%). The second-year sample of 24 students broke into eight males (33.3%), fifteen females (62.5%), and one individual (4.2%) who did not respond. The thirteen faculty members in the college for less than a year had eight males (61.5%) and five females (38.5%). Faculty members in the college for more than a year broke into 26 males (56.5%), seventeen females (37.0%), and three (6.5%) who did not respond. All seven of the administrators who responded were males.

College D. The 50 first-year students in College D were composed of 27 males (54.0%), eighteen females (36.0%), and five (10.0%) who did not reply. The 27 students in the second-year sample had eighteen males (66.7%), seven females (25.9%), and two persons (7.4%) who did not respond. The nineteen faculty members and administrators combined had sixteen males (84.2%) and three females (15.8%).

Generally all faculty groups in the four colleges had a strong majority of males (70.0% or more). This trend was emphasized when

Table 6

Distribution of Respondents Used in All Colleges by
Number and Percentage According to Sex Category

	M		F		No reply		Total	
	f	%f	f	%f	f	%f	f	%f
COLLEGE A								
Students - year 1	14	34.2	25	60.9	2	4.9	41	100.0
Students - year 2	2	50.0	2	50.0	0	0.0	4	100.0
Faculty and Administrators	8	72.7	1	9.0	2	18.2	11	100.0
COLLEGE B								
Students - year 1	24	44.4	30	55.6	0	0.0	54	100.0
Students - year 2	25	43.9	32	56.1	0	0.0	57	100.0
Faculty and Administrators	22	70.9	6	19.4	3	9.7	31	100.0
COLLEGE C								
Students - year 1	34	61.8	21	38.2	0	0.0	55	100.0
Students - year 2	8	33.3	15	62.5	1	4.2	24	100.0
Faculty - less 1 year	8	61.5	5	38.5	0	0.0	13	100.0
- more 1 year	26	56.5	17	37.0	3	6.5	46	100.0
Administrators	7	100.0	0	0.0	0	0.0	7	100.0
COLLEGE D								
Students - year 1	27	54.0	18	36.0	5	10.0	50	100.0
Students - year 2	18	66.7	7	25.9	2	7.4	27	100.0
Faculty and Administrators	16	84.2	3	15.8	0	0.0	19	100.0

administrators (males in all cases) were added to teaching staff to make the faculty group. Students in Colleges A and B were 55 to 60 percent female, while the reverse was so in Colleges C and D.

Distribution of Students by Program

Five categories of response for type of program were established. They were: Transfer, General, Upgrading, Technical, and Other. An additional category of No Response was included. This information on distribution of students by program was summarized in Table 7 for all of the colleges.

College A. The 41 first-year students in College A were found to be in the following programs: sixteen (39.0%) were in the Transfer program, twelve (29.3%) were in an Upgrading program, six (14.6%) were enrolled in a Technical program and five (12.2%) indicated Other programs. No one was in a General program and two (4.9%) gave no reply. The only second-year courses offered were in a Business Program.

College B. In this college the majority of students were in the Transfer program. Out of a total first-year sample of 54 students, 38 (70.4%) were enrolled in the Transfer program. Eight students (14.8%) indicated that they were registered in a General program and two (3.7%) listed the category of Other program. Four students (7.4%) were in a Technical program and two (3.7%) gave no reply. No student was registered in the Upgrading program. This distribution represented 54 students spread throughout ten programs.

In second-year a majority of the sample, 42 students (73.7%) were also registered in the Transfer program. Nine (15.8%) were registered in a General program and two (3.5%) were registered in a

Technical program. Two students (3.5%) were in the Other category and two (3.5%) gave no response. No second-year students were registered in an Upgrading program since this would logically appear to be a program for first-year students only. The distribution of second-year students represented 57 students spread throughout twelve programs.

College C. The Transfer program was also the most populous program in College C, although it was not nearly so strongly represented as in College B. The total first-year sample was 55 students and 28 (50.9%) were in the Transfer program. Ten students (19.2%) indicated that they were in a General program, while three (5.5%) were in an Upgrading program. Only one student (1.8%) indicated registration in a Technical program. Twelve students (21.8%) indicated that they were in Other programs. This likely indicated that the diversity of programs in this college did not fit adequately into the limited number of program choices available to students on the questionnaire. Further substantiation for this point came from the fact that an analysis of the first-year sample indicated that 50 students were spread throughout 24 programs, with five in no specific program. This spread of students throughout the college's programs was what aided the decision to use all of the first-year responses in spite of the fact that the sample had been drawn from a group which did not represent all first-year students on the campus of College C. The diversity of students was felt to be adequate enough to represent most of the student body.

The second-year sample in College C contained a majority of Transfer students. Fourteen students (58.3%) were in the Transfer program, while two students (8.3%) chose the General program category.

One student (4.2%) indicated that he was in an Upgrading program and three students (12.4%) chose the Technical program category. Four students (16.7%) indicated the Other program category. This distribution represented 24 students spread throughout twelve programs, with four in no specific program. The spread in the second-year sample also lent credibility to the decision to use all 24 of the questionnaires returned. In spite of the low return and the misinterpreted full-time attendance question (see p. 60 above), the spread of students throughout the college was considered adequate.

College D. The first-year sample in College D was also dominated by Transfer students. The total sample of 50 students contained 29 students (58.0%) who indicated that they were in a Transfer program. Two students (04.0%) chose the General program category and five (10.0%) indicated that they were in Other programs. Two students (04.0%) in the sample were in an Upgrading program. Upgrading students were generally excluded from the sampling procedures since they did not take classes on campus. However, two students were chosen in the process of gathering alternates and since they indicated that they spent a considerable amount of time on the main campus, they were used in the sample.

FINDINGS FROM ITEM ANALYSIS

The recommended method involved establishing how many respondents to an item had scored a "correct" response. If the number of responses agreeing with the "correct" response was 67 percent or more the particular item was given a positive point. Any item which

Table 7

Distribution of Students in All Colleges by Number
and Percentage According to Program

	Transfer		General		Upgrading		Technical		Other		No reply		Total	
	f	%f	f	%f	f	%f	f	%f	f	%f	f	%f	f	%f
COLLEGE A														
Year 1	16	39.0	0	0.0	12	29.3	6	14.6	5	12.2	2	4.9	41	100.0
Year 2	0	0.0	0	0.0	0	0.0	4	100.0	0	0.0	0	0.0	4	100.0
Second year courses were only available in the Business Program														
COLLEGE B														
Year 1	38	70.4	8	14.8	0	0.0	4	7.4	2	3.7	2	3.7	54	100.0
Year 2	42	73.7	9	15.8	0	0.0	2	3.5	2	3.5	2	3.5	57	100.0
COLLEGE C														
Year 1	28	50.9	10	18.2	3	5.5	1	1.8	12	21.8	1	1.8	55*	100.0
Year 2	14	58.3	2	8.3	1	4.2	3	12.5	4	16.7	0	0.0	24**	100.0
COLLEGE D														
Year 1	29	58.0	10	20.0	2+	4.0	0	0.0	5	10.0	4	8.0	50	100.0
Year 2	19	70.4	4	14.8	0	0.0	0	0.0	3	11.1	1	3.7	27	100.0

*Fifty students spread throughout 24 programs, five with no specific program.

**Twenty students spread throughout 12 programs, four with no specific programs.

+Upgrading students were generally excluded from the sample since they did not take classes on campus.

had 33 percent or less of the respondents agreeing to the "correct" response was given a negative value. These positives and negatives were added throughout the series of questions used in a particular scale, a constant was added to eliminate negatives and the result was a score for a particular scale. Pace (1969b:36-37) had indicated that certain criteria were to be applied to these percentages. He applied them himself when items were eliminated from the first edition of the College and University Environment Scales to make an improved second edition.

Two criteria in particular stated that no mean item percentage throughout the groups taking the test should be lower than ten percent and no higher than 90 percent. Thus an analysis of the mean percentages was made and those under ten percent and over 90 percent were noted. In addition to this first criteria, the standard deviations resulting from the spread of item percentages through all groups on each separate item were to be ten or higher. An analysis of all 100 items in the test was made and items which fell sharply below ten standard deviation units were noted. Combining these two criteria, 33 items were eliminated from the test for failing to discriminate adequately. These items were listed in Appendix C.

The distribution of mean item percentages for the retained items were summarized in Table 8. Throughout all of the scales only one item was in the ten to nineteen percent category. None of the retained items exceeded the upper limit of 90 percent. Similarly the standard deviations were also presented in Table 8. Some items were retained even though their standard deviations were somewhat lower than the recommended ten points or higher. Seven items had

Table 8

Distribution of Mean Percentages and Item Standard Deviations for Respondents in All Colleges Choosing "Correct" for All Items in Each Scale

	Practicality 13 items	Community 15 items	Awareness 11 items	Propriety 14 items	Scholarship 14 items	Campus Morale 18 items	Quality of Teaching... 6 items
	Mean Percentages						
Percentages choosing correct							
90 - 100	0	0	0	0	0	0	0
80 - 89	0	1	0	0	0	1	1
70 - 79	0	1	4	2	0	2	2
60 - 69	3	1	2	2	5	3	0
50 - 59	4	2	0	2	1	2	1
40 - 49	3	2	3	4	4	6	1
30 - 39	3	6	1	3	2	4	1
20 - 29	0	1	1	1	2	0	0
10 - 19	0	1	0	0	0	0	0
0 - 9	0	0	0	0	0	0	0
	Standard Deviations						
Standard deviations							
20 plus	1	0	0	0	0	0	1
15 - 19	2	4	1	4	2	5	2
10 - 14	7	5	6	6	9	11	2
8 - 9.9	2	5	3	2	2	1	0
7 - 7.9	0	0	1	1	1	0	0
6 - 6.9	1	1	0	0	0	1	1

standard deviations that ranged from 6.4 to 7.9. The item which occurred under the fifteen Community items was also the same item in the Campus Morale and Quality of Teaching . . . scales. The other items in the 7.0 to 7.9 range were closer to 7.9. In all cases of lower standard deviation than recommended, the item was retained due to its satisfactory mean percentage and its apparent appropriateness to the particular scale.

The percentages of the retained items were also examined to determine what the probability was that a particular item could have shifted out of the 67 percent plus or 33 percent less range of being counted in a score. This analysis gave some indication of how stable any score was in a particular college. Using Pace's (1969b:44) probability table the information was collected and summarized into Table 9 for all of the colleges.

In College A 71.6 percent of the retained items had odds of nine to one of being counted in a score and 7.5 percent had odds of four to one. The number of items in the doubtful range represented 20.9 percent of the total items retained. In College B 49 percent of the retained items had odds of nine to one and 13.1 percent had odds of four to one. The number of items in the doubtful range of two to one and one to one odds represented 37.4 percent of the retained items.

College C had 55.7 percent of the retained items with odds of nine to one and 13.4 percent of the items had odds of four to one. The percentages of items in the doubtful range was 30.9 percent. College D had 64.9 percent of the retained items with odds of nine to one and 8.2 percent in the four to one category. The percentage of items in the

Table 9

Probabilities that Item Percentages Used To Calculate
Scores Would Have Been Counted in a Score

Item percentages used to calculate scores				
	Total 66%+ or 33%-	30% to 33% and 66% to 70% doubtful	28%, 29%, 71% and 72%	73% or higher and 27% or lower
COLLEGE A No. of items %f Odds of being counted	67 100.0	14 20.9 2 to 1 and 1 to 1	5 7.5 4 to 1	48 71.6 9 to 1
COLLEGE B No. of items %f Odds of being counted	99 100.0	37 37.4 2 to 1 and 1 to 1	13 13.1 4 to 1	49 49.5 9 to 1
COLLEGE C No. of items %f Odds of being counted	97 100.0	30 30.9 2 to 1 and 1 to 1	13 13.1 4 to 1	54 55.7 9 to 1
COLLEGE D No. of items %f Odds of being counted	122 100.0	34 27.9 2 to 1 and 1 to 1	10 8.2 4 to 1	78 64.9 9 to 1

doubtful range was 27.9 percent.

After having made these particular analyses the items were rescored on the 67 percent plus and 33 percent minus basis using only the 67 remaining items. These 67 items were the only ones used throughout the remainder of the scoring procedures.

FINDINGS FROM SCORING METHOD ONE

Since scoring method was an opinion-poll approach to the questionnaire, the results did not readily reveal between-group differences. As a consequence the results for all groups, in each college, were presented in summary form in Table 10 in order that gross differences and trends would be more evident. Due to the deletion of the poorly discriminating items each of the seven scales had a different range. Care must be taken in reading the results so that each score is seen in the proper perspective of its possible range. The scores discussed below represent collective scores for each group.

College A

Any reference to "faculty" in this subsection on College A referred to the combined group of teaching staff and administrators.

On the Practicality scale the possible range was from zero to 26. The students achieved a score of twelve and the faculty obtained a score of eleven. On the Community scale with its possible range of zero to 30 the students and faculty obtained fifteen and nineteen respectively. The Awareness scale with its range of zero to 22 produced a score of twelve for the students and fourteen for the faculty. The Propriety scale, ranging from zero to 28, yielded a score of thirteen for the students and sixteen for the faculty.

Scores on the Scholarship scale had a possible range from zero to 28 and the students achieved a score of eighteen and the faculty a score of sixteen. The Campus Morale scale ranged from zero to 36 and the student score was 22 with the faculty obtaining 27. The final scale, Quality of Teaching . . . ranged from zero to twelve. The students in College A scored nine and the faculty eleven.

The most obvious trend in this college was the tendency for the faculty to score higher than the students. This was so in five out of the seven scales, however the differences in score were quite small in some cases and in others somewhat larger. The students were higher than the faculty on the Community and Scholarship scales.

College B

Use of the term "faculty" in this sub-section referred to the combined group of teaching staff and administrators.

The possible range on the Practicality scale was from zero to 26. First and second-year students obtained scores of sixteen and twelve respectively. The faculty scored fourteen points. On the Community scale which ranged from zero to 30 the first-year students achieved a score of sixteen, the second-year students obtained eleven, and the faculty scored thirteen points. On the Awareness scale with its range of zero to 22 the first-year students scored sixteen, while the second-year students attained fourteen points and the faculty obtained eighteen. The Propriety scale with its range of zero to 28 received scores of 21, eighteen, and twenty from the first-year students, the second-year students, and the faculty respectively.

The Scholarship scale had a range of zero to 28 and the scores were fourteen, thirteen, and eleven respectively for the first-year

students, the second-year students, and the faculty. The Campus Morale scale ranged from zero to 36. The scores on this scale were 25, 23, and 26 respectively for the first-year students, the second-year students, and the faculty. On the Quality of Teaching . . . scale, with a range of zero to twelve the scores were eight, nine, and eight respectively for the first-year students, the second-year students, and the faculty.

First-year students in College B tended to score consistently higher on the scales than did the second-year students. This was so in six out of the seven scales with the Quality of Teaching . . . scale being the exception. The faculty also tended to score higher on five out of the seven scales than did the second-year students. The faculty scored lower than the second-year students on the Scholarship and Quality of Teaching . . . scales.

College C

In this sub-section on College C faculty on campus less than a year were specified by the notation (- 1 year) while the faculty on campus more than a year were noted with (+ 1 year). "Faculty" referred to the combined group of faculty (+ 1 year) and administrators.

In the Practicality scale with a possible range of zero to 26, the scores were twelve, thirteen, thirteen, twelve, and eleven respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year) and faculty. The Community scale, ranging from zero to 30, received scores of fifteen, fifteen, sixteen, ten, and ten respectively from the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. On the

Awareness scale which ranged from zero to 22 the scores were fifteen, fourteen, sixteen, thirteen, and fourteen respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. The Propriety scale ranged from zero to 28 and had scores of seventeen, eleven, nineteen, thirteen, and fourteen respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty.

On the Scholarship scale which ranged from zero to 28 the scores were thirteen, nine, seventeen, ten, and eleven respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. The Campus Morale scale had a possible range of zero to 36 and the scores were 21, seventeen, 24, fifteen, and seventeen respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. The Quality of Teaching . . . scale ranged from zero to twelve and the scores were ten, nine, twelve, nine and nine respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty.

In College C the first-year students tended to score higher than the second-year students on five out of the seven scales. The second-year students scored higher on the Practicality scale and had the same score as the first-year students on the Community scale. Examining the scores of the second-year students and those of the faculty produced no clear trend. The students were higher on the Practicality and Community scales but were lower on Propriety and Scholarship scales. The scores on Awareness, Campus Morale, and Quality of Teaching . . . scales were the same for the second-year

students and faculty.

The most striking trend occurred between the scores of the two faculty groups. Faculty on campus for less than a year consistently scored higher on all scales than did the faculty on campus for more than a year. In some cases the differences were quite large.

College D

The term "faculty" in this sub-section referred at all times to the combined group of teaching staff and administrators.

The scores in College D on the Practicality scale which ranged from zero to 26 were thirteen, thirteen, and fourteen respectively for the first-year students, the second-year students, and the faculty. On the Community scale which ranged from zero to 30 the scores were twelve, nine, and ten respectively for the first-year students, the second-year students, and the faculty. The Awareness scale ranged from zero to 22 and the scores were sixteen, eleven, and twelve respectively for the first-year students, the second-year students, and the faculty. On the Propriety scale which ranged from zero to 28 the scores were ten, seven, and eight respectively for the first-year students, the second-year students, and the faculty.

The Scholarship scale ranged from zero to 28 and the scores were fifteen, thirteen, and twenty respectively for the first-year students, the second-year students, and the faculty. On the Campus Morale scale which ranged from zero to 36 the scores were seventeen, eight, and sixteen respectively for the first-year students, the second-year students, and the faculty. The Quality of Teaching . . . scale ranged from zero to twelve and the scores were eight, five, and six respectively for the first-year students, the second-year students, and

Table 10

Modified Cues Scores for All Colleges after Dropping 33 Questions
Which Did Not Discriminate Adequately among the Colleges

	Practicality	Community	Awareness	Propriety	Scholarship	Campus Morale	Quality of Teaching...
COLLEGE A Students Faculty*	12 11	15 19	12 14	13 16	18 16	22 27	9 11
COLLEGE B Students - year 1 Students - year 2 Faculty *	16 12 14	16 11 13	16 14 18	21 18 20	14 13 11	25 23 26	8 9 8
COLLEGE C Students - year 1 Students - year 2 Faculty - (-1 yr.) - (+1 yr.) Faculty* (+1 yr.)	12 13 13 12 11	15 15 16 10 10	15 14 16 13 14	17 11 19 13 14	13 9 17 10 11	21 17 24 15 17	10 9 12 9 9
COLLEGE D Students - year 1 Students - year 2 Faculty*	13 13 14	12 9 10	16 11 12	10 7 8	15 13 20	17 8 16	8 5 6
Possible ranges	0-26	0-30	0-22	0-28	0-28	0-36	0-12

*These Faculty groups included Administrators.

the faculty.

The first-year students had higher scores in six out of the seven scales than did the second-year students. The scores were the same on the Practicality scale. The differences in some cases were small but in others the spread was quite noticeable as in the case between the scores on the Campus Morale scale. The first-year students perceived the Morale score to be seventeen, while the second-year students perceived it to be eight. An additional trend which was quite strong, although the differences in some cases were small, occurred between the second-year students and the faculty. In all seven of the scales the faculty scored higher than did the students.

Total College Results

To obtain results in this sub-section the questionnaires for all persons in a college were scored as though the college was one group. This gave scores on each of the scales for each college as a complete unit. The information was summarized and placed in Table 11 to enable gross comparisons between total colleges.

The Practicality scale which ranged from zero to 26 had scores of eleven, fourteen, twelve, and fourteen respectively for Colleges A, B, C, and D. The Community scale with a range from zero to 30 had scores of sixteen, twelve, eleven, and nine respectively for Colleges A, B, C, and D. On the Awareness scale which ranged from zero to 22 the scores were thirteen, fifteen, fifteen, and twelve respectively for Colleges A, B, C, and D. The Propriety scale ranged from zero to 28 and the scores on it were fourteen, nineteen, sixteen, and eight respectively for Colleges A, B, C, and D.

The Scholarship scale which ranged from zero to 28 had scores of

Table 11

Modified Cues Scores for Each College after Dropping
33 Questions Which Did Not Adequately Discriminate

	Practicality	Community	Awareness	Propriety	Scholarship	Campus Morale	Quality of Teaching...
College A	11	16	13	14	17	25	9
College B	14	12	15	19	12	25	9
College C	12	11	15	16	16	20	9
College D	14	9	12	8	16	13	7
Possible ranges	0 - 26	0 - 30	0 - 22	0 - 28	0 - 28	0 - 36	0 - 12

seventeen, twelve, sixteen, and sixteen respectively for Colleges A, B, C, and D. The Campus Morale scale with a range from zero to 36 had scores of 25, 25, twenty, and thirteen respectively for Colleges A, B, C, and D. The Quality of Teaching . . . scale with a range of zero to twelve had scores of nine, nine, nine, and seven respectively for Colleges A, B, C, and D.

The most obvious result was that the colleges showed some similarities and some wide differences. To expect two colleges to be exactly alike would be unrealistic. The scores for Colleges B and D were the same on the Practicality scale. On the Community scale there were no similar scores. Colleges B and C scored the same on the Awareness scale, and on the Propriety scale there were no similar scores. Colleges C and D had the same score on the Scholarship scale, and Colleges A and B had the same scores on the Campus Morale scale. On the Quality of Teaching . . . scale, Colleges A, B, and C had the same scores.

Combination of Administrators with Teaching Staff

The need to combine the small number of administrators in each college with the teaching staff was discussed earlier. Unfortunately this combination hid the effect that administrators had upon the score of the group in which they were placed. To have any measure of the way in which administrators responded to the questionnaire would necessitate having the teaching staff score free of the administrative factor. Once this was done two sets of scores were available for comparison: the faculty, including administrators, scores and faculty, excluding administrators scores. With this information the additive or subtractive effect of the administrators became visible. The administrative influence on scores

was summarized into Table 12. Since specific scores can be drawn from this table, the following general observations were made.

In College A the addition of administrators resulted in an increase in the scores on six out of the seven scales. The increases ranged from one point to six points. Scores on the Quality of Teaching . . . scale were the same for faculty, including administrators, and faculty, excluding administrators. In College B the Awareness, Propriety, and Campus Morale scales were higher when administrators were added. The difference in each case was one point, and was likely due to higher administrator expectations and resulting efforts to convince others about total college goals. Less classroom interaction could also have been a factor. Practicality and Scholarship scales remained the same and the Community and Quality of Teaching . . . scales were lower by one point for the faculty group with administrators.

The influence in College C was clearer. Five out of seven scales were higher when administrators were added. Actual differences were one and three points. Scores on the Community and Quality of Teaching . . . scale stayed the same. In College D scores on the Practicality, Scholarship, and Campus Morale scales were higher when administrators were added. The Awareness and Propriety scales remained the same and the Community and Quality of Teaching . . . scales were lower when the administrators were added to the faculty group.

In many of these cases the increases or decreases were small and to put these changes in perspective the administrative component of the faculty group should be known. In College A administrators made up

Table 12

Cues Scores for the Faculty and the Faculty Including Administrators
- Scoring Method One

	College A		College B		College C		College D	
	Faculty 1	Faculty 2*	Faculty 1	Faculty 2*	Faculty 1	Faculty 2*	Faculty 1	Faculty 2*
Practicality	10	11	14	14	10	11	13	14
Community	13	19	14	13	10	10	12	10
Awareness	13	14	17	18	13	14	12	12
Propriety	15	16	19	20	10	14	8	8
Scholarship	13	16	11	11	10	11	19	20
Campus morale	21	27	25	26	14	17	13	16
Quality of teaching...	11	11	9	8	9	9	7	6

*This Faculty group included Administrators

54.5 percent of the faculty-administrator group. In Colleges B, C, and D the percentages were 12.9 percent, 13.2 percent, and 21.1 percent respectively.

FINDINGS FROM SCORING METHOD TWO

Scoring method two allowed for individual scores to be calculated on the basis described earlier (see p.64 above). Averaging these individual scores for each group gave a group score somewhat analogous to the group score of scoring method one. The following section includes the results from using scoring method two. In addition to these results for the groups in each college the standard deviations for each group's score on each scale were presented. Inter-group comparisons were also presented by using the t test for independent sample means. For each college the scores were given with the results of the t tests following. Tables with complete information for each college followed the text for each college. Only the group scores on the seven scales and particular significant differences were noted in the written text. The possible ranges for the scores on each of the seven scales was the same in scoring method two as were the ranges in scoring method one. For this reason the scale ranges were not repeated each time a set of scores was reported in this section.

College A

Any reference to "faculty" in this sub-section on College A referred to the combined group of teaching staff and administrators.

The group scores in College A using the second scoring method were summarized into Table 13. On the Practicality scale the score for

Table 13

Group Scores for College A Derived by Averaging Individual Scores on Each of the Scales, Including Standard Deviation and the Probability of the t Ratio

	Practicality		Community		Awareness		Propriety		Scholarship		Campus Morale		Quality of Teaching...	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Students	11.9	4.1	14.5	6.7	13.2	5.3	13.1	6.0	15.9	5.0	22.2	7.5	7.9	2.7
Faculty and Administrators	11.8	5.0	15.8	6.7	13.6	2.5	14.4	5.4	13.8	6.8	24.1	4.9	9.1	1.8
Possible ranges	0 - 26		0 - 30		0 - 22		0 - 28		0 - 28		0 - 36		0 - 12	
Probability of t ratio	0.949		0.511		0.824		0.515		0.264		0.449		0.167*	

*Significant at the 0.20 level.

students was 11.9, while the faculty had a score of 11.8. The Community scale had scores of 14.5 and 15.8 respectively for the students and the faculty. The Awareness scale produced scores of 13.2 and 13.6 for the respective student and faculty groups. Scores on the Propriety scale were 13.1 and 14.4 respectively for the students and the faculty. On the Scholarship scale the students obtained a score of 15.9 while the faculty obtained 13.8. Campus Morale scores were 22.2 for the students and 24.1 for the faculty. The Quality of Teaching . . . scale produced scores of 7.9 for the students and 9.1 for the faculty.

The only probability of the t ratio which approached significance was the one between student and faculty scores on the Quality of Teaching . . . scale. The probability of t ratio yielded a significance at the very low statistical level of 0.20. Faculty scores were higher on five out of the seven scales although the differences were slight, ranging from 0.1 to 2.1. The students were higher in their score than the faculty on the Practicality and Scholarship scales.

College B

The complete information for College B was summarized into Table 14. Any reference to "faculty" in this report on College B applied to the combined group of teaching staff and administrators.

The scores on the Practicality scale in College B were 13.3, 12.2, and 13.8 respectively for the first-year students, the second-year students, and the faculty. On the Community scale the first-year students, the second-year students, and the faculty had scores of 12.9, 13.1, and 12.7 respectively. On the Awareness scale the

scores were 14.0, 14.3, and 14.0 respectively for the first and second-year students and the faculty. The Propriety scale produced scores of 17.3, 16.2, and 17.7 respectively for the first and second-year students and the faculty. On the Scholarship scale the scores were 12.6, 12.8, and 11.5 for the first-year students, the second-year students, and the faculty respectively. The Campus Morale scale had scores of 22.2, 22.0, and 23.1 respectively for the first and second-year students and the faculty. The Quality of Teaching . . . scale produced scores of 7.0, 7.6, and 7.9 for the first-year students, the second-year students, and the faculty respectively.

In comparing the scores of the first and second year students the only probability of t ratio which approached any significance was the one between the Practicality scale scores. The probability for these scores was statistically significant at the 0.20 level, No definite trend emerged between the size of first and second-year student scores. The first-year students were higher on the Practicality, Propriety, and Campus Morale scales but the differences were slight with a range from 0.2 to 0.9. The second-year students were higher on the Community, Awareness, Scholarship, and Quality of Teaching . . . scales. Again the differences were slight ranging from 0.2 to 0.6.

The comparison of second-year students and faculty produced one significant comparison on the Practicality scale. The probability of t ratio was statistically significant at the 0.10 level. An examination of score sizes between second-year students and faculty did not produce any definite trend. The faculty was higher on the Practicality, Propriety, Campus Morale, and Quality of Teaching . . . scales. The differences ranged from 0.3 to 1.6. The students were

Table 14

Group Scores for College B Derived by Averaging Individual Scores on Each of the Scales, Including Standard Deviation and the Probability of the t Ratio

	Practicality		Community		Awareness		Propriety		Scholarship		Campus Morale		Quality of Teaching...	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Students - year 1 Students - year 2 Faculty and Administrators Possible ranges	13.3	3.8	12.9	6.9	14.0	4.9	17.3	6.2	12.6	6.2	22.2	7.6	7.0	2.9
	12.2	4.5	13.1	6.8	14.3	4.9	16.2	6.0	12.8	5.6	22.0	7.3	7.6	2.9
	13.8	4.3	12.7	6.1	14.0	4.4	17.7	5.5	11.5	5.8	23.1	7.4	7.9	2.9
	0 - 26		0 - 30		0 - 22		0 - 28		0 - 28		0 - 36		0 - 12	
STUDENTS, YEAR 1 VS. STUDENTS, YEAR 2														
Probability of t ratio	0.159		0.857		0.749		0.332		0.874		0.916		0.278	
STUDENTS, YEAR 2 VS. FACULTY AND ADMINISTRATORS														
Probability of t ratio	0.112		0.779		0.728		0.250		0.299		0.519		0.652	

higher on the remaining scales of Community, Awareness, and Scholarship. The differences in these three instances ranged from 0.3 to 1.3.

College C

The complete information on scores resulting from scoring method two for College C was summarized into Table 15. Any use of "faculty" by itself in this section applied to the combined group of faculty on campus for more than a year and the administrators. Other faculty groups were specified as follows: faculty (- 1 year) referred to teaching staff on campus for less than a year, and faculty (+ 1 year) referred to teaching staff on campus for more than one year.

On the Practicality scale scores were 13.0, 13.1, 12.0, 10.8, and 11.1 respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. The Community scale yielded scores of 13.9, 13.0, 14.9, 8.4, and 9.1 for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. Scores on the Awareness scale were 14.3, 13.7, 13.6, 11.4, and 11.7 for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. The Propriety scale produced scores of 14.8, 14.0, 16.8, 10.9, and 11.9 respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty.

The Scholarship scale had scores of 13.0, 11.6, 15.4, 10.1, and 9.7 respectively for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty. The scores on the Campus Morale scale were 20.5, 17.7, 22.0, 17.2, and 17.6 respectively for the first-year students, the second-year students, faculty

(- 1 year), faculty (+ 1 year), and faculty. On the final scale, Quality of Teaching . . . the scores were 7.6, 7.4, 9.9, 7.2, and 7.4 for the first-year students, the second-year students, faculty (- 1 year), faculty (+ 1 year), and faculty.

A comparison of the scores between first and second-year students revealed that there were no probabilities of the t ratio that were at a statistically significant level. First-year scores, however, did tend to be higher than did second-year scores. The first-year scores were higher in six out of the seven scales with the differences ranging from 0.2 to 2.8. The second-year students were higher on the Practicality scale but the difference was 0.1.

Comparing the scores of faculty (- 1 year) and faculty (+ 1 year) produced a number of statistically significant results. There was a statistically significant difference at the 0.01 level between scores on the Community, Propriety, Scholarship, Campus Morale, and Quality of Teaching . . . scales. In addition to these differences, the faculty on campus less than a year had higher scores on all seven of the scales than did the faculty on campus for more than a year. The differences between these scores ranged from 2.2 to 6.5.

The final comparison between the second-year students and faculty produced one probability of t ratio which was statistically significant at the 0.02 level. The difference occurred on the Community scale. An examination of the scores obtained by the second-year students and the faculty revealed that the students were higher than the faculty on six out of the seven scales. The differences ranged from 0.1 to 3.9. The scores on the Quality of Teaching . . . scale were the same.

Table 15

Group Scores for College C Derived by Averaging Individual Scores on Each of the Scales, Including Standard Deviation and the Probability of the t Ratio

	Practicality		Community		Awareness		Propriety		Scholarship		Campus Morale		Quality of teaching...	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Students - year 1	13.0	4.2	13.9	5.7	14.3	4.6	14.8	6.3	13.0	5.5	20.5	7.5	7.6	2.9
Students - year 2	13.1	4.3	13.0	7.5	13.7	4.1	14.0	7.2	11.6	5.8	17.7	7.8	7.4	2.8
Faculty - (-1 yr.)	12.0	3.4	14.9	5.9	13.6	4.2	16.8	5.6	15.4	5.2	22.0	6.1	9.9	2.3
- (+1 yr.)	10.8	4.4	8.4	5.8	11.4	4.7	10.9	5.1	10.1	6.1	17.2	6.0	7.2	2.3
Faculty (+1 yr.) and Administrators	11.1	4.6	9.1	5.8	11.7	4.6	11.9	5.8	9.7	5.9	17.6	6.2	7.4	2.4
Possible ranges	0 - 26		0 - 30		0 - 22		0 - 28		0 - 28		0 - 36		0 - 12	

Table 15 (continued)

	Practicality	Community	Awareness	Propriety	Scholarship	Campus Morale	Quality of Teaching...
STUDENTS, YEAR 1 VS. STUDENTS, YEAR 2							
Probability of t ratio	0.922	0.547	0.298	0.606	0.320	0.410	0.777
FACULTY, LESS 1 YEAR VS. FACULTY, MORE 1 YEAR							
Probability of t ratio	0.377	0.001	0.132	0.001	0.006	0.013	0.001
STUDENTS, YEAR 2 VS. FACULTY (ADMINISTRATORS INCLUDED)							
Probability of t ratio	0.078	0.015	0.179	0.172	0.204	0.950	0.926

College D

Complete information on group scores in College D was summarized into Table 16. Any reference to "faculty" in the written text on College D applied to the combined group of teaching staff and administrators.

Scores on the Practicality scale were 12.8, 12.5, and 12.5 respectively for the first-year students, the second-year students, and the faculty. On the Community scale the scores were 12.4, 9.9, and 11.7 for the first-year students, the second-year students, and the faculty respectively. The Awareness scales produced scores of 12.8, 11.9, and 12.2 for the first-year students, the second-year students, and the faculty in that order. On the Propriety scale the scores were 11.3, 8.3, and 10.5 for the first and second-year students and the faculty respectively.

Scores on the Scholarship scale were 13.6, 13.2, and 17.3 respectively for the first and second-year students and the faculty. Campus Morale scores were in the order of 16.9, 14.3, and 17.8 for the first-year students, the second-year students, and the faculty. The Quality of Teaching . . . scale produced scores of 6.8, 5.7, and 6.1 for the groups of first-year students, the second-year students, and the faculty respectively.

Comparison of scores between the first and second-year students produced a number of statistically significant relationships. The differences between first and second year students on the Community, Campus Morale, and Quality of Teaching . . . scales were at the 0.10 level of significance. The difference between students on the Propriety scale was at the 0.01 level of significance. An

Table 16

Group Scores for College D Derived by Averaging Individual Scores on Each of the Scales, Including Standard Deviation and the Probability of the t Ratio

	Practicality		Community		Awareness		Propriety		Scholarship		Campus Morale		Quality of Teaching...	
	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD
Students - year 1	12.8	4.1	12.4	5.6	12.8	4.1	11.3	4.7	13.6	5.3	16.9	6.1	6.8	2.2
Students - year 2	12.5	3.4	9.9	5.7	11.9	3.9	8.3	4.3	13.2	5.4	14.3	6.4	5.7	2.9
Faculty and Administrators	12.5	3.8	11.7	6.5	12.2	3.9	10.5	5.4	17.3	4.7	17.8	6.5	6.1	2.3
Possible ranges	0 - 26		0 - 30		0 - 22		0 - 28		0 - 28		0 - 36		0 - 12	
STUDENTS, YEAR 1 VS. STUDENTS, YEAR 2														
Probability of t ratio	0.699		0.058		0.341		0.008		0.771		0.076		0.077	
STUDENTS, YEAR 2 VS. FACULTY (ADMINISTRATORS INCLUDED)														
Probability of t ratio	0.994		0.315		0.817		0.123		0.011		0.065		0.652	

investigation of the score sizes between first and second-year students revealed that the first-year students were higher on all seven of the scales. The gross differences ranged from 0.3 to 3.0.

A comparison of second-year student and faculty scores produced three probabilities of the t ratio that were statistically significant. Differences between students and faculty on the Propriety and Campus Morale scales were significant at the 0.10 level. The difference on the Scholarship scale was at the 0.01 level. In terms of gross size of scores the faculty was higher than the second-year students on six out of the seven scales. Scores were the same on the Practicality scale. The differences in size on the other six scales ranged from 0.3 to 4.1.

Total College Results

Individual scores for each respondent in each college were averaged to produce an overall score for each college on each of the seven scales. The scores for total colleges were summarized into Table 17.

Scores for the respective Colleges A, B, C, and D were 11.9, 13.0, 12.2, and 12.7 on the Practicality scale. On the Community scale the scores were 14.8, 12.9, 11.8, and 11.6 respectively for Colleges A, B, C, and D. The Awareness scale had scores of 13.3, 14.1, 13.1, and 12.4 for the respective Colleges A, B, C, and D. On the Propriety scale the scores were 13.3, 16.9, 13.5, and 10.3 for the respective Colleges A, B, C, and D.

The Scholarship scale produced scores of 15.5, 12.5, 11.4, and 14.2 for Colleges A, B, C, and D respectively. On the Campus Morale scale the scores were 22.5, 22.3, 18.8, and 16.4 for each of the

Table 17

Scores for Total Colleges Derived by Averaging All Individual Scores on Each of the Scales, Including Standard Deviation and the Probability of the t Ratio

	Practicality		Community		Awareness		Propriety		Scholarship		Campus Morale		Quality of Teaching...	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
College A	11.9	4.3	14.8	6.7	13.3	4.8	13.3	5.9	15.5	5.4	22.5	7.5	8.1	2.6
College B	13.0	4.2	12.9	6.6	14.1	4.7	16.9	6.0	12.5	5.9	22.3	7.4	7.4	2.9
College C	12.2	4.5	11.8	6.5	13.1	4.6	13.5	6.4	11.4	5.8	18.8	7.2	7.5	2.7
College D	12.7	3.9	11.6	5.9	12.4	3.9	10.3	4.9	14.2	5.4	16.4	6.2	6.4	2.5
Possible ranges	0 - 26		0 - 30		0 - 22		0 - 28		0 - 28		0 - 36		0 - 12	
COLLEGE A VS. COLLEGE D														
Probability of t ratio	0.228		0.002		0.250		0.001		0.163		0.001		0.001	
COLLEGE B VS. COLLEGE C														
Probability of t ratio	0.157		0.156		0.054		0.001		0.142		0.001		0.855	

respective Colleges A, B, C, and D. The final scale, Quality of Teaching . . . had scores of 8.1, 7.4, 7.5, and 6.4 for Colleges A, B, C, and D respectively.

Only two comparisons were made between the four colleges; dissimilarity in sampling procedures would have voided other comparisons. The comparison between Colleges A and D produced a number of statistically significant differences. The scores on the Community, Propriety, Campus Morale, and Quality of Teaching . . . scales were all significant at the 0.01 level. No scores were exactly the same for either of these two colleges, however, the differences on the Practicality, Awareness, and Scholarship scales were less than one point.

The comparison between Colleges B and C also produced some statistically significant differences. The differences on the Propriety and Campus Morale scales were at the 0.01 level. Additional differences were at the 0.1 level on the Awareness and Scholarship scales. Gross differences on the Practicality and Quality of Teaching . . . scales were less than one point.

Combination of Administrators with Teaching Staff

Administrators were also combined with the teaching staff in the use of the second scoring method. A comparison of scores obtained by the faculty only and the faculty including the administrators was made after the second scoring method had been used. The objective was the same as that of the comparison under scoring method one: to attempt an indirect analysis of the effect administrators had upon the faculty-administrator group score. The specific scores related to this

analysis were summarized into Table 18. Specific scores are in the table and as a consequence the following general observations were made.

In College A the addition of the administrators resulted in an increase in six out of the seven scales. The differences ranged from 0.1 points to 3.8 points. The Awareness scale decreased by 0.2 points when the administrators were added. College B showed no definite trends with three of the seven scales showing an increase. The actual increases were 0.3 points and 0.6 points. The Practicality and Scholarship scales decreased by 0.5 points and 0.2 points respectively when the administrators were added. The Awareness scale remained the same.

College C showed an increase in six out of the seven scales, with the differences ranging from 0.2 points to 1.0 points. The Scholarship scale actually decreased by 0.4 points when the administrators were added to the faculty group. No definite trend occurred in College D. Four out of the seven scales, Awareness, Propriety, Campus Morale, and Quality of Teaching . . . increased by 0.2 points to 0.8 points. The Scholarship scale remained the same and the Practicality and Community scales decreased by 0.2 points and 0.3 points respectively.

In many of these cases the increases or decreases were small and to put these changes in perspective the administrative component of the faculty group should be known. In College A the administrators made up 54.5 percent of the faculty-administrator group. In Colleges B, C, and D the percentages were 12.9 percent, 13.2 percent, and 21.1 percent respectively.

Table 18

Cues Scores for the Faculty and the Faculty Including Administrators
- Scoring Method Two

	College A		College B		College C		College D	
	Faculty 1	Faculty 2*	Faculty 1	Faculty 2*	Faculty 1	Faculty 2*	Faculty 1	Faculty 2*
Practicality	11.2	11.8	14.3	13.8	10.8	11.1	12.7	12.5
Community	13.2	15.8	12.1	12.7	8.4	9.1	12.0	11.7
Awareness	13.8	13.6	14.0	14.0	11.4	11.7	11.9	12.2
Propriety	13.2	14.4	17.4	17.7	10.9	11.9	10.3	10.5
Scholarship	10.0	13.8	11.7	11.5	10.1	9.7	17.3	17.3
Campus morale	21.6	24.1	22.8	23.1	17.2	17.6	17.0	17.8
Quality of Teaching...	9.0	9.1	7.6	7.9	7.2	7.4	5.9	6.1

*This Faculty group included Administrators.

Chapter 6

SUMMARY AND CONCLUSIONS

SUMMARY

The original purpose of this study was two-fold. In the first place an attempt was made to obtain information about the perceptions of the environment held by different groups within the particular colleges. The intended purpose of seeking this information was to better equip the administrators in their efforts to provide better educational environments in which the college members, students, and staff, could work. The information was not, ideally, to be the sole possession of the administrative staff. The hope was that all groups in the college might use the data to initiate efforts at better understanding and cooperation.

The value of knowing that certain groups within a college hold varying perceptions and expectations for major spheres of the college's activities should be obvious. Such knowledge places the individuals within these groups in a position to decide whether variations in perception facilitate the college goals which, as members of a group, they are striving to achieve.

The second major purpose was to establish the value of the College and University Environment Scales as an instrument for use in Alberta Colleges. To pursue the between-group comparisons vital to the first purpose it became necessary to introduce an additional method

of scoring. Thus the information necessary to carry out both purposes of the study came from two sources: method one and method two. As a consequence the first part of this chapter gave a summary view of the colleges presented by scoring method one. The second section attempted a comparison of the two scoring methods by indicating changes which occurred in the summary view due to the different methods. The comparison also delineated points at which various groups changed position in the ranking of scores from method one to method two.

The third section of the chapter attempted to draw some conclusions relative to the data of the study and the original comparisons that were proposed. The fourth section attempted to make an overall assessment of the value of the College and University Environment Scales in the light of certain problems which became evident during the study. The final two sections dealt with implications of the study for the colleges and brief recommendations for further research.

College A

Students in College A saw the environment as having slightly more vocational orientation (Practicality scale) than did the staff. In the same direction the students perceived more order in administrative and class activities than did the faculty. The difference in scores on the Practicality scale was only one so the amount of difference in perception was slight and should not be overplayed. Generally students and faculty both perceived low levels of practicality in the environment. On a possible maximum 26 points both groups were just below the middle of the range.

Both students and faculty rated much higher on the Scholarship scale. While students tended to perceive somewhat more of an interest in ideas, knowledge for knowledge's sake, and intellectual discipline in the environment than did the faculty, both groups scored well over the middle point of the scale range. Consistent with the perception of scholarship were clear perceptions of scholarly instructors, high standards, and teaching infused with warmth and interest towards the students. The faculty tended to perceive an atmosphere which had more of this characteristic than did the students, however both groups achieved scores that were very high on the Quality of Teaching and Faculty-student Relationships scale.

Faculty members in College A saw the campus as more cohesive, friendly, and group-oriented (Community scale) than did the students. This was quite possible due to a small faculty (N=23) which was likely more cohesive, friendly, and group-oriented and thus perceived the environment to be more cohesive, friendly, and group-oriented than did the students. Neither group perceived much emphasis on self-understanding, a wide range of creative opportunities, or concern about world events. The students rated one point over the middle of the Awareness scale and the faculty rated three points over the middle.

Faculty members perceived an environment that was considerably more polite and considerate (Propriety scale) than did the students. Again this difference could have been, in part, due to the more cohesive faculty group. Generally both groups did perceive the environment to be acceptant of social norms, and to encourage friendly assimilation into campus life. Intellectual goals were exemplified and shared in an atmosphere that was supportive and spirited (Campus Morale

scale). The faculty did, however, perceive the college to be more exemplified by this characteristic than did the students.

College B

Both the first-year students and the faculty tended to see the college as being more characterized by vocational emphasis within a structured, though not repressive, environment than did the second-year students. The first-year students (Practicality scale) perceived more of this practicality in the environment than did either second-year students or faculty. In juxtaposition the perception of an environment characterized by emphasis on intellectuality and scholastic discipline (Scholarship scale) was rated higher by the first-year students than by the second-year students. The faculty saw the college having the least emphasis on the scholarship aspect. Generally the first-year students perceived Practicality to rank over Scholarship, and the same was true for the faculty only the perception was stronger. The second-year students tended to perceive the practicality aspect to rank slightly higher.

Faculty members perceived a high degree of emphasis on reflectiveness and self-understanding, political meaning and idealistic commitment, along with a variety of opportunities for creative activities (Awareness scale). Students tended to concur with this perception although the first-year students were lower than the faculty and the second-year students were lower than both other groups. All groups had positive perceptions of the awareness aspect of the environment. All groups also perceived the campus atmosphere to be mannerly, considerate, proper, and conventional (Propriety scale). The first-year students perceived more of this characteristic than did the faculty,

however the faculty score was only one point lower than the first-year students' score. The second-year students perceived the least amount of this characteristic with a score two points lower than the faculty and three points below the first-year group. All groups perceived the climate to be well infused with warmth, interest, and helpfulness towards students in a milieu of scholarly professors who set high standards and who were clear, adaptive, and flexible (Quality of Teaching . . . scale). The second-year students rated this characteristic one point higher than the faculty and first-year students.

An environment characterized by acceptance of social norms, friendly assimilation into campus life, and a commitment to intellectual pursuits (Campus Morale scale) was perceived at a high level by all three groups. However, the faculty perceived more of this characteristic, with the first, then the second-year students next in order. In spite of this the scale (Community) which yielded perceptions about a friendly, cohesive, and group-oriented campus was generally rated low by all three groups. The first-year students perceived more of this characteristic than the faculty and the second-year students perceived considerably less than the faculty. This seemingly inconsistent information on these last two scales could be an indication of a generally friendly and cohesive campus within groups with a possible suggestion of undercurrents of disagreement, tension, and lack of overall cohesiveness between groups. This situation could very easily be the result of a developing character and purpose in a new and young college marked by organizational changes necessary to meet the growing demands of an increasingly wide range of clientele.

College C

The scale (Practicality) which described both a vocational and collegiate emphasis showed that the second-year students perceived more of this characteristic in the environment than did the first-year students, and the faculty. In all instances the scores were quite low, either at or below the middle of the possible range. This was a reversal of the experience in other colleges which, in most cases, saw the faculty and first-year students rating most scales higher than the second-year students.

On the scale (Scholarship) that described an environment characterized by intellectuality and scholastic discipline, the first-year students saw the campus as having more of this characteristic than either of the other two groups. In this instance the second-year students, with a score well below the middle of the range, very strongly repudiated the perception of this characteristic in the campus environment. Generally all scores on this scale were well below the mid-point of the possible range. If anything emerged from a comparison of the Practicality and Scholarship scales it was that Practicality was perceived to be slightly more predominant, yet the strength of this perception was by no means overwhelming in any group. The rather wide variety of program offerings could have tended to diffuse a dominant response to either of the practicality or scholarship characteristics. The sampling technique could also have been a factor. A careful analysis of more specific groups than simply first and second-year might also have revealed a more definite response to these scales.

Emphasis on three kinds of meaning - personal, poetic, and political (Awareness scale) was ranked above the middle of the range by

all three groups. First-year students perceived that there was more concern with self-understanding and reflectiveness and more opportunity for creative opportunities than did the second-year students and faculty. These last two groups scored the same. The difference between all three groups was only one point. A sense of politeness and consideration (Propriety scale) was seen by the first-year students as being a dominant factor in the environment. The faculty perceived this element of considerateness, properness, and conventionality to be lower than the first-year students. The faculty score was still at mid-point of the scale range. The second-year students rejected any strong manifestation of this characteristic by ranking it three points below the middle of the possible range.

The first-year students also saw the campus as being fairly well characterized by acceptance of group norms, throughout an atmosphere where intellectual goals were shared under conditions of supportive and spirited personal and social relationships (Campus Morale scale). Second-year students and faculty, scoring the same on this scale perceived below the mid-point of the possible range. Their scores represented a drop of five points from the first-year students' perception. In view of the response on this last scale the perception of an atmosphere in which a high academic quality of teaching, carried on in a warm and supportive manner (Quality of Teaching . . . scale), was interesting. All groups perceived this characteristic to be very highly evident on the campus, although the first-year students perceived more than the faculty and second-year students. These last two groups ranked the same.

A sense of group welfare and group loyalty which encompassed

the college as a whole (Community scale) was not strongly perceived by either of the student groups. Both groups scored at the mid-point of the possible range. The faculty almost rejected any existence of this characteristic with a perception score just one-third of the way up the possible range.

Possibly one of the most interesting findings occurred between the two faculty groups in College C. Faculty on campus for less than a year consistently perceived more of the scale characteristics to be present on the college campus. The first-year faculty clearly perceived the campus to be dominated by the pursuit of knowledge and theories carried on rigorously and vigorously (Scholastic scale), as opposed to the more vocational and collegiate emphasis (Practicality scale). While perceptions held by the faculty on campus for more than a year were not strong in the areas of practicality and scholarship, they tended to perceive more of the practicality aspect as opposed to the scholarly characteristic. The faculty group on campus for less than a year perceived the campus to be well characterized by aspects of: politeness, consideration, and conventional behavior (Propriety scale); acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and a commitment to intellectual pursuits (Campus Morale scale); and high quality academic instruction, with clear, adaptive, and high standards (Quality of Teaching and Faculty-student Relationships scale). Faculty on campus for more than a year were quite positive in their perception of this last aspect (Quality of Teaching . . . scale) but perceived moderate to low levels of the other two characteristics (Propriety and Morale).

The faculty on campus for less than a year saw the campus

climate as also characterized by strong emphasis on self-understanding, identity, a wide range of creative and appreciative opportunities, and a concern for the present and future welfare of mankind (Awareness scale). The other faculty group also perceived positive amounts of these characteristics but on a somewhat lower level of importance in the environment. The factors of friendliness, cohesiveness, and group-orientation (Community scale) on the campus were perceived by the first-year faculty to be present to a moderate extent. Faculty on campus for more than a year perceived these characteristics to be much less in evidence than did the first-year faculty group.

College D

The first and second-year students in College D both saw a campus environment with less vocational and collegiate emphases and less orderly supervision in the administration and classwork (Practicality scale) than did the faculty. However, the faculty had a perception score of only one point more than the students. The important observation was that all three groups only perceived a moderate emphasis on these factors, with all three scores being either on or one point above the mid-range of the scale. Somewhat counter to the above findings, the faculty saw considerably more in the campus environment which led them to rank intellectuality and scholarly discipline (Scholarship scale) much higher than did either of the student groups. The faculty scored six points above the mid-point of the range on this scale while the first-year students were only one point above and the second-year students were one point below. Generally the staff perceived more of the scholarly elements in the environment while the first-year students were only slightly positive in the same direction.

The second-year students were slightly negative, favoring a more practical-vocational (Practicality scale) emphasis in the environment.

On the remaining scales the first-year students perceived the elements of the scale to be emphasized more than did the other two groups. The faculty consistently followed as the second highest, with the second-year students following as the lowest. Elements in the environment that reflected an emphasis on self-understanding, and identity, wide opportunities for creative and appreciative relationships, and a concern for the present and future welfare of man (Awareness scale) were rated highest by the first-year students at five points above the middle of the possible range. The faculty was lower at one point above the middle and the second-year students were at the mid-point. Factors in the environment which emphasized politeness and consideration (Propriety scale) were perceived to be at a very low level by all three groups. None of the groups scored at the middle of the possible range. The first-year students were four points below the middle, with the faculty following at six points and the second-year students at seven points below the middle.

The first-year students perceived more of the elements in the environment than did the faculty which made up a high academic quality of teaching with high, yet flexible standards and infused with warmth and interest toward the students (Quality of Teaching . . . scale). The faculty perceived these elements to be present only enough to score at the middle of the possible range, while the second-year students were one point below. All three groups did not perceive the environment to be well endowed with a friendly, cohesive, and group-oriented atmosphere (Community scale). Each group scored well below the mid-

point of the possible range, with the first-year students, however, scoring highest and the faculty and second-year students following respectively.

Possibly the most striking example of the second-year students to score consistently below the other groups was on the Campus Morale scale. The elements in the college climate which generated acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and an acceptance of intellectual pursuits and freedom of expression were perceived very similarly by the faculty and first-year students. Their perceptions placed these characteristics as existing at a moderate level, just below the mid-point of the scale range. The second-year students perceived these elements to be virtually non-existent by virtue of their score which was just over one-fifth of the possible scale range.

Total Colleges

College A definitely was characterized by an emphasis on the scholarly activities (Scholarship scale) as opposed to the more vocational orientation (Practicality scale). A sense of friendliness and cohesiveness (Community scale) was perceived to be moderately present as were the elements which contributed to emphasis on self-understanding and identity, creative and appreciative opportunities, and concern with the welfare of mankind (Awareness scale). Perceptions of the politeness and consideration of the environment (Propriety scale) were also considered to be moderately present in the college as a whole. Elements contributing to acceptance of social norms, friendly assimilation into campus life and a commitment to intellectual pursuits

and freedom of expression (Campus Morale scale) were perceived at a very positive level throughout the total college. The same was true for perceptions related to high standards of instruction infused with warmth, interest, and helpfulness toward students (Quality of Teaching . . . scale).

College B tended to favor the elements of practicality (Practicality scale) as opposed to the more scholarly and intellectual aspects (Scholarship scale) of the environment. Elements that reflected a concern about personal, poetic, and political meaning (Awareness scale) were perceived to exist at a positive level throughout the total college. Similar positive perceptions were in evidence, though somewhat more strongly, in relation to an environment that was polite and considerate (Propriety scale). Elements contributing to a friendly, cohesive, and group-oriented campus were not perceived to be so strongly in evidence (Community scale). Perceptions about the acceptance of social norms, group cohesiveness, friendly assimilation into campus life, and a commitment to intellectual pursuits and freedom of expression (Campus Morale) were at a strong, positive level. The same was evident, only somewhat stronger, for perception of the environment as supportive of high academic quality of teaching infused with warmth, interest, and helpfulness toward students (Quality of Teaching . . . scale).

College C, when viewed as a whole, tended to perceive more elements of the scholarly, intellectual factors (Scholarship scale) in the environment as opposed to the vocational and practical (Practicality scale) elements. Elements related to personal, poetic, and political types of meaning (Awareness scale) were perceived to be

present in a fairly strong manner. Factors in the environment which were perceived to influence politeness and consideration (Propriety scale) were present in a mildly positive degree. Perception of the campus environment on a total basis did, however, play down the influence of a friendly, cohesive, and group-oriented campus (Community scale). These elements were perceived to be present in a low degree. The factors which were perceived to contribute to acceptance of social norms, friendly assimilation into campus life, and a commitment to intellectual pursuits and freedom of expression (Campus Morale) did not exist in a very strong way on this campus. They tended to be in existence in a slightly positive degree. Factors in the environment of College C which contributed to a high academic quality of instruction infused with warmth, interest, and helpfulness toward students (Quality of Teaching . . . scale) were perceived to be very strongly present.

In College D the factors of the environment which contributed to scholarly, intellectual pursuits (Scholarship scale) slightly outweighed the vocational and practical orientation (Practicality scale). Neither orientation was clearly dominant over the other. Factors contributing to emphasis on personal, poetic, and political meaning (Awareness scale) were perceived to be moderately present. Factors which contributed to a polite and considerate environment (Propriety scale) were perceived at a very low level. The same was the case for perception of elements that influenced a friendly, cohesive, and group-oriented campus (Community scale). Factors in the environment which contributed to acceptance of social norms, group cohesiveness, friendly assimilation into campus life and a commitment to intellectual pursuits

and freedom of expression (Campus Morale scale) were only slightly present. The morale factors were not perceived to be widely present. Perception of factors which contributed to a high standard of instruction infused with warmth, interest, and helpfulness toward students was also slightly more than positive, although again the factors were not perceived to be strongly present.

COMPARISON OF THE SCORING METHODS

The comparison in this section was dealt with in two parts. The first part was a summary of the groups in each college in a manner similar to the summary in the section above. Rather than develop at length the same kind of summary, only areas of description that differed markedly from the summary above were mentioned. The second part of the comparison dealt with the actual effect on group and college scores in terms of rank order. Each of these two comparisons were dealt with by specific college.

College A

Using scoring method two the characterization of the groups in College A would have been essentially the same. Differences in scores between the students and the faculty were all in the same direction as those found in the first scoring method. The actual size of the differences between the scores of students and faculty were considerably less using scoring method two. This would have tended to influence the characterization of the perceptions in the sense that they would not have been nearly so positive as under the first scoring method. Differences were reduced under the second scoring method. Student scores were the least affected with four of the seven

remaining essentially the same, two were lower, and one was higher.

Faculty scores were lowered by scoring method one with five of the seven being lower, one was higher, and one was the same. This lowering of faculty scores was likely due to the fact that the faculty tended to give no response to more of the questions than did the students, and the difference in scores was possibly not a function of the scoring method but rather was indicative of the pattern of faculty responses.

The tendency for faculty scores to be higher than student scores was not altered under method two. Students were still lower on five out of seven scales, although the differences were much smaller.

College B

With the second scoring method in College B a number of differences occurred. All of the three groups in the college still tended to perceive the vocational and practical elements to be dominant over the intellectual and scholarly elements. Even though the general orientation of the groups remained the same on the perception of these two aspects, the position of the groups in terms of rank based on score size changed. Using scoring method two the faculty perceived the greatest amount of the practicality factor, instead of ranking second as was the case in method one. The second-year students ranked second instead of third and the first-year students ranked third instead of first. On the scholarship factor the second-year students rated highest instead of lowest, and the first-year students ranked second instead of first. The faculty position on the Scholarship scale remained the same.

Perceptions tended to be in much the same direction on the remainder of the other factors. Much shifting of rank position took place in terms of the scores on the second method but the overall

positive orientation was maintained. The only exception was the Community scale. The first-year students dropped from a slightly positive position to a slightly negative position. The second-year students perceived the Community element more strongly in the second scoring but the general orientation was still slightly negative. The faculty score remained the same.

On the Awareness scale the faculty ranked second instead of first, and the second-year students ranked first instead of third when the second scoring method was used. The first-year students' rank remained the same. On the Propriety scale first-year students ranked second instead of first and the faculty ranked first instead of second. Second-year students ranked the same. On the Quality of Teaching . . . scale the faculty ranked first instead of second, the second-year students ranked second instead of first, and the first-year students ranked third instead of second. No changes of rank order of scores occurred on the Campus Morale scale when the second scoring method was used.

Generally the differences between the scores of first and second-year students and between second-year students and faculty were reduced. The scores of first-year students were all reduced. Three of the scores from the second-year group were reduced, one was higher, and three remained the same. Faculty scores tended to be lower with four scores decreased and three remaining the same. The tendency for first-year students to score higher than second-year students in method one (six scores out of seven) was reduced (four scores out of seven) in method two. The same high scoring tendency of faculty over second-year students in method one (five scores out of seven) was also reduced

(four scores out of seven) in method two.

College C

The orientation to the practicality and vocational aspects of the campus environment were in the same direction in scoring method two as in scoring method one. The practicality element was favored by all groups in opposition to the intellectual and scholarly factor. The perceptions favoring the practicality feature were definitely not strong and in the second method the faculty perceived the scholarship factor to be the least significant instead of the second-year students as was the case in method one.

Perceptions by the first and second-year students and the faculty were generally in the same direction for scoring method two as they were for method one, however scores tended to be slightly lower. Two exceptions to this were the second-year students' scores on the Campus Morale and Propriety scales. The Campus Morale score was in the same general direction but was slightly higher and the Propriety score was higher by three points thus changing the score from slightly negative to positive.

A number of other scores did not move in the same perceptual direction in method two. Three group scores on two scales were actually lower to the extent that the direction of the perception was changed from slightly positive to negative perceptions with scores below the midpoint of the possible range. Two of these scores were student scores on the Community scale and the third was the faculty score on the Propriety scale.

The comparison of scores for faculty on campus less than a year and faculty on campus for more than a year still resulted in

consistently higher scores for the faculty (- 1 year) group even though method two was used for scoring. The faculty group on campus still tended to favor the scholarly and intellectual elements as opposed to the vocational and practical factors. All other perceptions for the faculty (- 1 year) group were still positive in method two but the scores were definitely lower. While many of the faculty (+ 1 year) scores were quite low in method one, the lowering trend of method two actually changed the perceptions of the Awareness score from a positive to a negative result. The score on the Scholarship scale remained the same and the score on the Campus Morale scale increased from negative to only slightly negative. All other scores for the faculty (+ 1 year) group were in the same general direction but the scores were decreased.

The tendency for first-year students to score higher was not changed by the use of method two. In method one first-year students were higher than second-year students in five out of seven scales. This figure increased to six out of seven with method two. No dominant tendency existed between faculty and second-year students using method one. Three out of seven faculty scores were lower than second-year student scores using method one. These figures changed to six out of seven faculty scores being lower than second-year student scores when method two was used.

Differences between groups tended to be lower in College C when the second method was used although there were exceptions. Actual scores for first-year students were lower with five of the seven scores from the second method lower than the first method. One score was higher and one score was the same. For second-year students four scores were higher and three scores were lower. The faculty group on

campus for less than a year had all seven scores lower with the second method. Five of the seven scores were lower for the faculty group on campus for more than a year. One score was higher and one was the same. The faculty group including the administrators had five scores lower, one score was higher, and one was the same.

College D

The orientation of the three groups in College D to the vocational and practical elements and the intellectual and scholarly factors was much the same from method one to method two. Generally the staff perceived more of the scholarly elements in the environment than did the first or second-year students when method two was used. The slightly positive perceptions of the first-year students disappeared in method two and were replaced by relatively equal perceptions of both elements. The slight favoring of the practical and vocational element by the second-year students remained.

The general perceptual trends on the other scales were the same as in method one except that the perceptions were somewhat more positive in method two. Only three scores in the same perceptual direction experienced slight decreases in method two. The score for the second-year students on the Campus Morale scale actually increased by 6.3 points although the perceptual direction was still quite negative.

The differences between scores for groups arrived at by method two tended to be lower than those differences determined by method one. Of the scores in the first-year student group four out of seven were lower, two were higher, and one was the same. The scores for the second-year students were lower in method two in only one out of the seven scores. Five of these second-year scores were higher and one was

the same. Only three of the seven scores for the faculty were lower on method two while two were higher and two were the same.

The rank ordering of the scores between the three groups was the same for all the scales except for two. On the Practicality scale the first-year students were second instead of first and the faculty was first instead of second. On the Campus Morale scale the first-year students were first instead of second and the faculty was second instead of first. The second-year students remained the lowest, as was the case in the scores on all the other scales for methods one and two. As a result the tendencies for faculty to score higher than second-year students and first-year students higher than second-year students were not changed from method one to method two.

Total Colleges

The information for this section was summarized from Tables 11 and 17 into Table 19.

The scholarly emphasis in College A was maintained in method one but the strength was narrowed by a slight increase in the perceived importance of the practicality factor. Generally the characterization of the other areas was the same for method two as it was in method one. In all remaining areas except the awareness factor, which stayed the same, a slight decrease in perceived emphasis was noticed, however, the same general direction remained. Five out of the seven scores for College A were lower when method two was used and two scores were higher.

College B continued to favor the practicality element in the second scoring method, although the strength of this emphasis was lower due to a slight increase in the perceived importance of the scholarly factor. Under method two all other remaining factors in

College B maintained the same perceptual direction as with method one, except the factors were not perceived to be as strongly present. The community factor was an exception, however, since the strength of this perceived factor increased slightly. Five out of the seven scores were lower for College B when method two was used. The other two scores were higher.

In College C the use of method two made a sharp difference in the perception of the practical and scholarly factors. The perception of practicality and vocational opportunities remained much the same with method two. The perception of the intellectual and scholarly factors, however, fell very sharply when method two was used. The difference was so large that the practicality factor, while not very strong, became the dominantly perceived factor due to the decrease in the perceived importance of the scholarly elements. The remaining five factors in College C maintained the same general characterization that they had under method one. The only difference under method two was a slight decrease in the positive nature of the perceptions. The community factor was an exception since the strength of this perceived factor increased slightly. Five of the seven scores were lower for College C when method two was used and two were higher.

In College D the perceived importance of the scholarly element in the environment remained slightly dominant but was decreased when method two was used. However, the practical element also decreased sufficiently to allow for the continued dominance of the scholarly factor. Three of the five remaining factors remained much the same but were given slight increases in perceived importance. The quality of instruction factor remained much the same but experienced a slight

Table 19

Comparison of Total College Scores Derived
by Use of Scoring Methods One and Two

	College A	College B		College C		College D	
	*Method 1 **Method 2	*Method 1 **Method 2	*Method 1 **Method 2	*Method 1 **Method 2	*Method 1 **Method 2	*Method 1 **Method 2	*Method 1 **Method 2
Practicality	11 11.9	14 13.0	12 12.2	14 12.7			
Community	16 14.8	12 12.9	11 11.8	9 11.6			
Awareness	13 13.3	15 14.1	15 13.1	12 12.4			
Propriety	14 13.3	19 16.9	16 13.5	8 10.3			
Scholarship	17 15.5	12 12.5	16 11.4	16 14.2			
Campus Morale	25 22.5	25 22.3	20 18.8	13 16.4			
Quality of Teaching. . .	9 8.1	9 7.4	9 7.5	7 6.4			

*From Table 11.

**From Table 17.

decrease in perceived importance. The awareness factor remained the same. Four out of the seven scale scores in College D were increased by the use of method two. The other three scores were decreased.

Differences between the scores in Colleges A and D tended to be lower (six out of seven comparisons) when method two was used. The reverse seemed to be so when Colleges B and D were compared. Four out of the seven scores compared were higher, while the remaining three were lower.

CONCLUSIONS

The first conclusions relate to the two methods since the scores derived from the methods were compared above.

1. The kind of information that the College and University Environment Scales yielded appeared to be partially a function of the scoring technique.

- a. Method one resulted in larger gross differences between group scores but these differences were not subject to statistical comparisons due to the assumptions of non-normality in their derivation.

- b. Method two tended to have a negative or decreasing effect on score size, although a few obvious exceptions occurred, especially in College C. Care must be taken in attributing this result solely to the scoring technique. The size and resulting obscurity and impersonality possible in an institution the size of College C could easily have depressed results on both scoring techniques. The generality of the sampling, especially with students, could also have failed to find groups uniform enough to have produced

consistent perceptions. The response patterns could have been a factor but this later appeared to be unlikely since scores depressed throughout all groups, even those that responded well. In a very few instances scores even increased.

c. The application of the second method did not seem to change the general tendency of the results yielded under technique one, although a few exceptions did exist where scores were turned in a different direction. The general tendency was to lower the positiveness of the scores achieved in method one.

2. Perceptions of and expectations for a college appeared to be a function of time spent in the college and position held in the college.

a. First-year students in all colleges tended to have higher perception scores than did the second-year students. This lent credibility to the notion that, as students pass through an institution, their expectations tend to undergo a change from unreal expectations to expectations more consistent with reality in the college. This tendency was generally supported by the second scoring method. In two colleges the trend was slightly weakened but not sufficiently to change the direction. There was significance in realizing that this questionnaire was administered to most first-year students after they had been in the college for at least five months. If the test had been administered at the beginning of the students' first year the differences between first and second-year students might have been even more distinct. This time period would also seem to indicate that adjustment to the college environment does not occur quickly. This was further confirmed by the very sharp differences between new and experienced teaching staff in

College C.

b. A similar relationship appeared to exist between faculty and second-year students. Faculty members consistently scored higher and appeared to have higher expectations than did students who had been in the college for more than one year. In a few instances only first-year students had scores as high as the faculty. Method two generally supported the trend in three of the colleges, however expectations existed in this generalization in College C. No particular trend of faculty over students was evident in College C until method two was applied and then the faculty had scores consistently lower than the students. A possible explanation for this occurrence was again in the size and complexity of the college. Assuming the lower level of faculty scores to be closer to the reality of the college environment, the time factor for adjustment may be considerably longer than anticipated. Alternatively, the faculty themselves may have felt alienated by the size of the faculty group and the size of the college and these pressures could have resulted in the lower faculty scores. This faculty group also included administrators and the inclusion of these individuals actually raised the faculty scores.

c. The time factor was clearly brought out in the consistently higher scores of first-year faculty members over more experienced faculty members in College C. This could have easily been the result of the faculty size at this college. Being in a large faculty in a large college may make it difficult to become quickly attuned to the environment of the institution. The possibility of a thorough orientation period for new staff members would appear to be in order. Further, there could be much to be gained by trying to determine if the

higher expectations held by new staff members were worth incorporating into the overall environment of the college instead of allowing the new staff members to adjust to the college.

d. The influence of administrators on scores was somewhat mixed but in two of the colleges a majority of faculty scores increased when administrators were added to the group. In the other two colleges scores were increased but not in sufficient number to establish a majority.

3. The size of a college and the diversity of its opportunities also appeared to be a factor in the strength of perceptions that developed on various scales. Smaller colleges seemed to have stronger perceptions than did the larger colleges. Between-group differences also seemed to emerge more readily in the smaller colleges indicating that the smaller groups likely allowed for a quicker and stronger identity to develop within a group. This observation does not suggest that the smaller colleges were unanimous in their responses, but that similarities and trends seemed to emerge more readily.

4. No strong trends of similarity or dissimilarity emerged when between-college comparisons were made. Some aspects of the colleges appeared to be quite similar in both scoring methods. Other aspects were clearly different, especially under the statistical tests of method two. All the colleges, when compared, had similarities and differences, and, as expected, no two colleges were exactly alike. The smaller colleges did tend to be more inclined towards the scholarly and intellectual aspect of the environment as opposed to the practical and vocational side. Both of these were in non-university cities. The largest college also showed a tendency to favor the scholarly and intellectual

aspect and it was in a university city. The one college which did favor the practical-vocational factor was in a non-university city. The thinking behind these observations was that colleges in university cities would tend to be more practically and vocationally oriented. The colleges in non-university cities might tend to fulfill the role of a small university. This reasoning was not consistently supported.

The most obvious trend was that neither of the factors, practicality or scholarship was strongly perceived in any of the colleges. This possibly could have been an indication that colleges have not forged a clear goal or set of goals to which they are headed. In view of the recent attempts to encourage Alberta colleges to develop into broadly based community institutions this lack of clarity could be interpreted as a change-over phase for the colleges, many of which were started with hopes of seeing them become four-year, degree-granting institutions. In view of these considerations the possibility was just as real that none of the colleges would ever be totally practical or totally intellectually oriented. A balance and mix of both elements would likely be most **desirable**.

ASSESSMENT OF THE CUES

Before a final assessment of the College and University Environment Scales can be made a number of problems must be briefly discussed.

The first problem was related to the occurrence of even scores in the first method used to score the CUES. An even score occurred when the number of items answered in a keyed direction by a two-to-one consensus was balanced by an equal number in the opposite

direction. The result was a score equal to the constant added and in terms of a dominant characteristic this score indicated a type of neutrality or lack of dominance.

Pace (1969b:45-46) suggested that the likelihood of obtaining a two-to-one consensus on CUES might be greater in homogeneous colleges than in large heterogeneous universities or colleges. In a correlation of institutional size with the total number of items receiving two-to-one consensus Pace (1969b:46) found a negative relationship between size and the number of items with a two-to-one consensus. From these data Pace concluded that there was likely to be more consensus about a small environment than about a large one. The conclusion was partially substantiated in this study.

College A had one even score or 7.1 percent of the total group scores; College B had one even score or 4.8 percent of the total scores; College C had five even scores or 14.3 percent of the total scores; and College D had four even scores or 19.1 percent of the total scores. Colleges A and D were the smallest colleges. College C was the largest and College B was the second largest. The even scores from Colleges A, B, and C appeared reasonably consistent with Pace's conclusion. The four scores from College D could have resulted from the modifications made to the instrument. More likely was the consideration that College D was operating under rather difficult circumstances in the wing of a high school. A new campus was under construction and interaction with the high school appeared to be a source of problems in developing a clear identity for the college. In all likelihood the high number of even scores was not a characteristic of the instrument but was rather an indication of the uncertainty in the particular college environment.

The use of true and false questions in the instrument created some problems. The purpose of the two choices was to force respondents to make a choice on the assumption that everyone had some perception about various aspects of their college. Some respondents refused to make a choice in question areas where they felt they had little knowledge. A blank or zero response was the usual response by these individuals. The response was generally satisfactory (see Table 3) with the lowest percentage of actual items answered being 90 percent. This percentage occurred only once and other percentages of actual items answered were in the high 90 percent area. A more adequate explanation of how the opinion poll technique applied to the responses to gain a two-to-one consensus might have helped respondents rid themselves of the feeling that only two responses was an unrealistic expectation.

A more serious charge has been laid against the conceptual nature of the College and University Environment Scales. Mitchell (1969:714-715) indicated that instruments like the CUES were not truly representative of the person-environment interaction since they were not concerned with differential environmental effects on students of different personality characteristics. Even though CUES was based on the perception and interpretation of environmental objects by the individual, it was still not very predictive of individual behavior. Perhaps the environmental variables that were most important may be those that impinged directly on the individual through his dyadic or small group interactions. These may be the first-order effects, with second-order effect of the larger environment being influential only as they broadly defined the terms of the milieu and the kinds of first-order interaction

that were generally congruent with the environment.

These conceptual problems associated with attempts to define the interaction of person and environment must be solved in time if instruments like the CUES are to gain in value and credibility for the individual. At the present time, however, an instrument like the CUES does offer a considerable amount of information about various groups within colleges and about a multitude of variables in the environment. This wealth of information became even more apparent when analysis was made of the response of various groups to particular items as specific questions instead of parts in an overall scale score. A case in point here was Question 31 which read, "Channels for expressing student complaints are readily accessible." The perceptions related to this question would seem to be very important to administrators and teaching staff.

In College C, for example, 84.3 percent of the faculty (administrators included) agreed this was so, 84.6 percent of faculty (- 1 year) agreed this was so, 81.8 percent of faculty (+ 1 year) agreed this was so, 74.5 percent of the first-year students agreed this was so, and 62.5 percent of the second-year students agreed this was so. In College D 73.7 percent of the faculty (including administrators) agreed this was so, 55.6 percent of the second-year students agreed this was so, and 46.9 percent of the first-year students agreed this was so. Each question can be analyzed in this manner thereby giving considerable specific information about group reaction to aspects of the environment. Obviously the CUES offers a great amount of information, both actual and potential, about groups in the college. The instrument reveals little about the individual who makes up the group. Although the potential

exists for individual information the problem of the true-false and zero response must be solved. Treating zeros as false responses was not totally consistent with the final, individual score produced.

At this point CUES must be seen for what it is. The instrument does offer much information about the environment and groups within the environment. This information is not strictly treatable by normal statistical methods due to the two-to-one approach of the scoring method. The CUES is but one of many steps being taken in the attempt to clarify the interaction of person and environment in educational institutions. While the instrument requires much development, individuals in colleges should not hesitate to use it. Insight is offered into some of the possible problems that exist in a college. The user does not receive "hard" or definitive information and he must remember this, although the information that does become available can be the basis for a very thorough examination of the goals and aims of the college.

IMPLICATIONS

The interaction of people and environment in a college has important implications for many phases of the college program. Probably the most general implication can be raised by simply asking, "Do the differences that exist among the groups in the college aid the basic goals of the college?" "Are the efforts of the groups in the college impaired in any way by these differences?"

The differences also have considerable implication for the communication process within the college. This is especially so in application to new and prospective students and staff for the college.

Some of the differences which appeared in this study strongly suggest the need for student and staff orientation programs or the evaluation of presently existing programs. There would also appear to be a strongly implied need for some organizational structure which would allow for adequate communication among the significant groups within the college. This does not suggest that differences among these groups should be eliminated, but rather that a fuller understanding of these different orientations would likely produce considerable benefit.

Actually the implications of this study will depend on the point of view that persons in authority in the colleges hold toward the existence of difference within the college. Minimal differences will likely be easy to tolerate but gross differences such as occurred in some of the colleges should likely be matters of grave concern and insistent of immediate action. Gelso and Sims (1968:44) summed up the importance of the implications raised by studies of this nature.

Recent research in this area has offered much evidence that different campus groups cannot be dealt with as if they were a homogeneous body. Each group has unique perceptions, unique problems, and perhaps most important, unique potentialities.

Since the findings of this study basically concur with many of the findings on person-environment interaction it seems evident that administrators and student personnel practitioners should seriously consider the perceptions, the locations, and the positions of all segments of the college population when attempting to develop and implement programs and policies.

RECOMMENDATIONS AND FURTHER RESEARCH

A number of possible recommendations emerge from this study. Some relate specifically to the instrument and others relate to the area concerned with the findings and conclusions.

The Instrument

1. Obviously the area dealing with conceptual problems of person-environment interaction requires considerable attention. The manner in which future researchers attempt to continue definition of the variables in this interaction will determine the future usefulness of such approaches. Observations made by Feldman (1971:51-69) and his recommendations on the use of path analysis are important for consideration.

2. There might also be some value in allowing responses on the CUES to be made over a range of possible perceptions. A five-point scale which allowed for a meaningful zero response might be useful. This approach would produce a new set of information on the CUES but the modification could be a viable approach towards determining more specific information about the reaction of the individual with the environment.

3. The items of the instrument could also be examined to determine if reference is actually being made to activities that are indeed representative of the experiences in which students, staff, and administrators engage their time. Addition of new items for the last two groups would likely add considerably to the instrument.

4. Further users of the instrument should be careful to ensure that personal data questions garner sufficient information about respondents to guarantee proper determination of eligibility. In this

direction questions three and four of the "Instructions" of the instrument should be replaced with questions similar to the following:

How much of your time in the college is spent in official administrative duties?

- a. 75 percent or more of your time
- b. 25 percent or less of your time.

How long have you taught at this college?

- a. less than a year
- b. one year or more.

How many courses are you presently registered in?

- a. one
- b. two
- c. three
- d. four or more.

How much of your time in the college is spent in teaching or teaching-related duties (preparation, student consultation)?

- a. 75 percent or more of your time
- b. 25 percent or less of your time.

5. The second method of scoring should not be used. Used for comparison purposes in this study, the treatment of a zero response as a false answer is not logically defensible.

Findings and Conclusions

1. Some evaluation of the attitudes that people in colleges hold toward the amount of difference that can be tolerated might go a considerable way to placing the differences noted by the CUES into perspective.

2. The assumption (implicit in the Getzels-Guba model of educational administration) that a high degree of congruency between a person's expectations for a college and the major features of the environment results in more satisfaction and better work could be examined. The obvious extension of this assumption would be to determine if any correlation existed between scores on the CUES for students and some measure of student achievement. The precise type of examination required in a comparison of this nature would not be as completely

revealing as it might if more exact individual connection is made by instruments like CUES between the person and the environment.

3. The establishment of a year-to-year administration of an instrument like the CUES could give administrators a long-term picture of the major features of their college. This picture could become a major part of institutional evaluation and research. As the profile emerged the possibility of informing prospective clientele about the college in environmental terms might allow for students to achieve more congruency between their expectations and the college's major features. Subsequent testing during the year would also enable monitoring of changes in perceptions as they occurred. This would yield a more accurate picture of the timeline that new students and staff go through in adjusting to the college.

4. Barton (1961:61) pointed out that the CUES asks respondents to report how others in the college behave. The danger with this approach is that reporters could be reporting stereotypes that no longer exist. Knowledge of these dominant traditions of the institution can be important, however, since they can exert pressure in spite of their rejection by many individuals. Barton concluded that an additional approach to the CUES would be to ask respondents to report their own values and value-relevant behaviors in the areas probed by the CUES.

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APPENDICES

APPENDIX A
LETTERS OF TRANSMITTAL TO:
COLLEGE PRESIDENTS,
FACULTY ASSOCIATIONS, AND
STUDENT ASSOCIATIONS

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
THE UNIVERSITY OF ALBERTA

LETTER OF TRANSMITTAL TO PRESIDENTS

January 20, 1971.

Dear _____:

I am a graduate student presently working in the Department of Educational Administration at the University of Alberta, Edmonton. My specific area of interest is the development of the public colleges in Alberta. As such I am conducting a study entitled, "A Comparison of Student, Faculty, and Administration Perceptions of Their College Environment". I hope to be able to conduct the study in the five public colleges. Your college's participation in the study would be most sincerely appreciated.

Briefly the study attempts to define the way important groups within the college feel about their particular institution's environment. The thinking is that the pressure of the perceived environment influences the way groups behave in the college situation. The consequent information should be of value to individual college administrators in attempting to coordinate and guide various groups within the college toward the development of specific college programs.

The study is being undertaken in partial fulfillment of the requirements for the M.Ed. degree and is under the supervision of Dr. E. A. Holdaway and Dr. R. C. Bryce. It is also being supported, in part, by both the Alberta Colleges Commission and the College Administration Project. Consequently copies of the final study will be made available by the Colleges Commission to all participating colleges.

Should you decide to have your college participate it would require approximately 20 to 30 minutes of time from each respondent. A very straightforward questionnaire is being used to collect information. All administrators, all faculty, 50 first-year students, and 50 second-year students will be required from each college. The last two groups would necessitate sending me a list of all full-time first and second year students so as to draw samples.

Further I hope to be able to arrange an itinerary so that the questionnaire will be administered by myself throughout a single day at each college. This will ensure more complete results and hopefully a more carefully answered questionnaire. However the details of students lists and days can be worked out through correspondence or telephone message once you have reached a decision on participation

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20 January, 1971.

in the study.

Finally please accept my sincere thanks for your time in examining this over-long letter. I am sure you appreciate the necessity to the study of complete participation by all of the colleges. Regardless of your decision allow me to thank you in advance for your consideration of this request.

Should you require further elaboration on the study I can be reached at Edmonton 434-8989 (collect) between 6 P.M. and 7 P.M., Monday to Thursday.

Yours truly,

D. J. Cornish.

DJC:rc

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
THE UNIVERSITY OF ALBERTA

LETTER OF TRANSMITTAL TO FACULTY ASSOCIATIONS

February 5, 1971.

Dear _____:

I am a graduate student presently working in the Department of Educational Administration at the University of Alberta. I am conducting a study entitled, "A Comparison of Student, Faculty, and Administration Perceptions of Their College Environment". The study is being supported by both the Alberta Colleges Commission and the College Administration Project.

I have contacted your president and he has indicated that the administration is willing to participate in this study. He suggested that I contact you directly with a request for faculty participation.

This would involve receiving a bundle of questionnaires, and answer sheets for the faculty and then distributing them. The questionnaire is very straightforward, requiring about 20 minutes of each individual's time. The completed booklets and answer sheets would then be left with your president for my pickup when I come to the college to administer the questionnaire to the students.

I realize how very busy you and your colleagues must be but I am sure the 20 minutes of time will be well invested. Copies of the final study will be placed with each of the five participating institutions.

Please find enclosed a rough copy of the questionnaire and a self-addressed, stamped envelope and memorandum to help speed your reply.

Thank you so much for your consideration of this request and I look forward to a positive response.

Yours truly,

D. J. Cornish.

DJC:rc
encls.

THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION
THE UNIVERSITY OF ALBERTA

LETTER OF TRANSMITTAL TO STUDENT ASSOCIATIONS

February 5, 1971.

Dear _____:

I am in the process of conducting a study in the five public colleges in Alberta. The study is entitled, "A Comparison of Student, Faculty, and Administration Perceptions of Their College Environment". I have been in contact with your president and he suggested that I write directly to your council to request student participation.

The study is being supported by the administrators in your college and it is also being supported by the Alberta Colleges Commission and the College Administration Project.

I would require a list of all first and second year students by class. As soon as I receive this list I will draw a group of 50 first and 50 second-year students. Having done this I will send you 100 individual student notices arranged by class for distribution by your organization. These notices will request the participation of individual students and will indicate the time, place, and date. Participation will necessitate each student responding to a short-answer opinion poll. The opinion poll requires about 30 minutes to administer and write.

You would simply be required to obtain the lists of students and distribute the notices when I send them. I will be contacting your president indicating that you may be requesting the lists from him. Also I will arrange an appropriate place, date, and time with your president. This will be the date and time put on the individual student notices.

I trust that I can look forward to the cooperation of your student body in this study. It is essential that all groups in the college participate and copies of the final report will be made available to each of the five participating colleges.

Thank you so much for your kind consideration of this request.

Yours truly,

D. J. Cornish

DJC:rc

APPENDIX B
COVERING LETTERS FOR MAILED QUESTIONNAIRES

THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION
THE UNIVERSITY OF ALBERTA

COVERING LETTER TO ADMINISTRATORS

Dear Administrator:

Please find attached a copy of the College and University
Environment Scales and an answer sheet.

Would you please try to respond to the questionnaire at your
earliest convenience and return ONLY the answer sheet to _____.

He has kindly agreed to return the responses to me.

Please accept my thanks for your participation in this
study. A copy of the results will be placed in your library.

ALL RETURNS WILL BE HANDLED IN STRICT CONFIDENCE.

Yours truly,

D. J. Cornish.

DJC:rc

THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION
THE UNIVERSITY OF ALBERTA

COVERING LETTER TO FACULTY MEMBERS

Dear Faculty Member:

Please find attached a copy of the College and University Environment Scales and an answer sheet.

In correspondence with _____ he indicated that the Faculty had endorsed participation in this study.

A complete return is desirable and I would sincerely request that you respond at your earliest convenience. The questionnaire requires about 20 minutes to complete.

Please endeavor to return ONLY the answer sheet, within one week, to _____.

Accept my thanks for your most gracious participation in this study.

ALL RESULTS WILL BE HANDLED IN STRICT CONFIDENCE.

Yours truly,

D. J. Cornish.

DJC:rc

THE DEPARTMENT OF EDUCATIONAL ADMINISTRATION
THE UNIVERSITY OF ALBERTA

COVERING LETTER TO STUDENTS

Dear Student:

You have been chosen to participate in a study involving Students, Faculty, and Administrators in your college.

This study has received the endorsement of your Students' Association.

Please read the directions on the questionnaire and respond on the answer sheet using an HB pencil. It should require about 20 minutes to complete.

It is important to the study that participation be as complete as possible therefore I encourage you to respond. Copies of the final study will be placed in your library.

Please respond to the questionnaire even if it does not reach you immediately but please respond as soon after receipt as possible.

When you have completed the questionnaire insert the ANSWER SHEET and CARDBOARD liner ONLY in the return envelope and mail as promptly as possible.

Thank you so much for your cooperation.

ALL RESPONSES WILL BE TREATED IN STRICT CONFIDENCE.

Yours truly,

D. J. Cornish.

DJC:rc

APPENDIX C

THE COLLEGE AND UNIVERSITY AND ENVIRONMENT SCALES: SECOND EDITION,
SCORING KEY WITH DELETED ITEMS, AND
SAMPLE ANSWER SHEET

COLLEGE and UNIVERSITY ENVIRONMENT SCALES

by
C. ROBERT PACE

modified by
D. Cornish

Colleges differ from one another in many ways. Some things that are generally true or characteristic of one school may not be characteristic of another. The purpose of the College & University Environment Scales (CUES) is to help describe the general atmosphere of different colleges. The atmosphere of a campus is a mixture of various features, facilities, rules and procedures, faculty characteristics, courses of study, classroom activities, students' interests, extracurricular programs, informal activities, and other conditions and events.

You are asked to be a reporter about your school. You have lived in its environment, seen its features, participated in its activities, and sensed its attitudes. What kind of a place is it?

There are 100 statements in this booklet. You are to answer them *True* or *False*, using the answer sheet given you for this purpose.

As you read the statements you will find that many

cannot be answered *True* or *False* in a literal sense. The statements contain qualifying words or phrases, such as "almost always," "frequently," "generally," and "rarely," and are intended to draw out your impression of whether the situation described applies or does not apply to your campus as you know it.

As a reporter about your college you are to indicate whether you think each statement is *generally characteristic*, a condition that exists, an event that occurs or might occur, the way people generally act or feel—in short, whether the statement is more nearly *True* than *False*; or conversely, whether you think it is *not generally characteristic*, does not exist or occur, is more nearly *False* than *True*.

The CUES is not a test in which there are right or wrong answers; it is more like an opinion poll—a way to find out how much agreement or disagreement there is about the characteristics of a campus environment.

INSTRUCTIONS FOR MARKING THE ANSWER SHEET FOR CUES

A. PENCILS. Use an HB pencil. DO NOT USE INK OR BALL-POINT PEN.

B. MARK ONLY ON THE ANSWER SHEET. Do not mark on the questionnaire booklet as it may be re-used. Record your answer by blackening the guidelines marked T or F as in this sample.

SAMPLE ITEM

(1) Students are quite friendly on this campus.

(1) T F

C. IDENTIFYING INFORMATION. Fill in the information requested at the top of the sheet. NAME. Your name is required for initial identification purposes. ALL RESULTS WILL BE TREATED IN CONFIDENCE. I.D. NUMBER. Leave this blank.

D. PART ONE. Blacken the appropriate set of guidelines for the following three items.

1. Identify your major field of activity in this college.
 - a. University Transfer
 - b. General Program
 - c. Upgrading
 - d. Technical
 - e. Other

2. Identify your educational status.

- a. *First Year Student* in first or second quarter, semester, term or simply year 1 AT THIS COLLEGE.
- b. *Second Year Student* in third or more quarters, semesters, terms or simply in year 2 or more AT THIS COLLEGE.
- c. *Faculty*.
- d. *Administration*. President, Vice-President(s), Deans, Department Heads, or Admissions Officer (Registrar).

3. To what extent are you engaged in student, faculty, or administrative activities?

- a. 50% or more of your time
- b. 50% or less of your time

4. How long have you taught at this college?

- a. 1 year or less
- b. more than 1 year

E. PART TWO—MARKING THE ANSWER SHEET. Find Question 1 on the next page of this booklet. On the answer sheet blacken the appropriate set of guidelines, that is, T, if the statement is generally characteristic of your college, or, F, if the statement is not generally characteristic.

Proceed to answer all 100 items.

(Questions begin on next page)

1. Students almost always wait to be called on before speaking in class.
2. The big college events draw a lot of student enthusiasm and support.
3. There is a recognized group of student leaders on this campus.
4. Frequent tests are given in most courses.
5. Students take a great deal of pride in their personal appearance.
6. Education here tends to make students more practical and realistic.
7. The professors regularly check up on the students to make sure that assignments are being carried out properly and on time.
8. It's important socially here to be in the right club or group.
9. Student pep rallies, parades, dances, carnivals, or demonstrations occur very rarely.
10. Anyone who knows the right people in the faculty or administration can get a better break here.
11. The professors really push the students' capacities to the limit.
12. Most of the professors are dedicated scholars in their fields.
13. Most courses require intensive study and preparation out of class.
14. Students set high standards of achievement for themselves.
15. Class discussions are typically vigorous and intense.
16. A lecture by an outstanding scientist would be poorly attended.
17. Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussions.
18. It is fairly easy to pass most courses without working very hard.
19. The school is outstanding for the emphasis and support it gives to pure scholarship and basic research.
20. Standards set by the professors are not particularly hard to achieve.
21. It is easy to take clear notes in most courses.
22. The school helps everyone get acquainted.
23. Students often run errands or do other personal services for the faculty.
24. The history and traditions of the college are strongly emphasized.
25. The professors go out of their way to help you.
26. There is a great deal of borrowing and sharing among the students.
27. When students run a project or put on a show everybody knows about it.
28. Many senior (2nd year or more) students play an active role in helping new students adjust to campus life.
29. Students exert considerable pressure on one another to live up to the expected codes of conduct.
30. Graduation is a pretty matter-of-fact, unemotional event.
31. Channels for expressing students' complaints are readily accessible.
32. Students are encouraged to take an active part in social or political programs.
33. Students are actively concerned about national and international affairs.
34. There are a good many colorful and controversial figures on the faculty.
35. There is considerable interest in the analysis of value systems, and the relativity of societies and ethics.
36. Public debates are held frequently.
37. A controversial speaker always stirs up a lot of student discussion.
38. There are many facilities and opportunities for individual creative activity.
39. There is a lot of interest here in poetry, music, painting, sculpture, architecture, etc.
40. Concerts and art exhibits always draw big crowds of students.
41. Students ask permission before deviating from common policies or practices.
42. Most students wear coats and ties to class.
43. People here are always trying to win an argument.
44. Drinking and late parties are a general student practice.
45. Students occasionally plot some sort of escapade or rebellion.
46. Many students drive sports cars.
47. Students frequently do things on the spur of the moment.
48. Student publications never lampoon dignified people or institutions.
49. The person who is always trying to "help out" is likely to be regarded as a nuisance.
50. Students are conscientious about taking good care of school property.

51. The important people at this school expect others to show proper respect for them.
52. Student elections generate a lot of intense campaigning and strong feeling.
53. Everyone has a lot of fun at this school.
54. In many classes students have an assigned seat.
55. Student organizations are closely supervised to guard against mistakes.
56. Many students try to pattern themselves after people they admire.
57. New fads and phrases are continually springing up among the students.
58. Students must have a written excuse for absence from class.
59. The college offers many really practical courses such as typing, report writing, etc.
60. Students would likely decorate their rooms with pennants and pin-ups than with paintings, carvings, mobiles, fabrics, etc.
61. Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects.
62. Most courses are a real intellectual challenge.
63. Students put a lot of energy into everything they do in class and out.
64. Course offerings and faculty in the natural sciences are outstanding.
65. Courses, examinations, and readings are frequently revised.
66. Personality, pull, and bluff get students through many courses.
67. There is very little studying here over the weekends.
68. There is a lot of interest in the philosophy and methods of science.
69. People around here seem to thrive on difficulty—the tougher things get, the harder they work.
70. Students are very serious and purposeful about their work.
71. This school has a reputation for being very friendly.
72. All students must live in college approved housing.
73. Instructors clearly explain the goals and purposes of their courses.
74. Students have many opportunities to develop skill in organizing and directing the work of others.
75. Most of the faculty are not interested in students' personal problems.
76. Students quickly learn what is done and not done on this campus.
77. It's easy to get a group together for card games, singing, going to the movies, etc.
78. Students commonly share their problems.
79. Faculty members rarely or never call students by their first names.
80. There is a lot of group spirit.
81. Students are encouraged to criticize administrative policies and teaching practices.
82. The expression of strong personal belief or conviction is pretty rare around here.
83. Many students here develop a strong sense of responsibility about their role in contemporary social and political life.
84. There are a number of prominent faculty members who play a significant role in national or local politics.
85. There would be a capacity audience for a lecture by an outstanding philosopher or theologian.
86. Course offerings and faculty in the social sciences are outstanding.
87. Many famous people are brought to the campus for lectures, concerts, student discussions, etc.
88. The school offers many opportunities for students to understand and criticize important works of art, music, and drama.
89. Special museums or collections are important possessions of the college.
90. Modern art and music get little attention here.
91. Students are expected to report any violation of rules and regulations.
92. Student parties are colorful and lively.
93. There always seem to be a lot of little quarrels going on.
94. Students rarely get drunk and disorderly.
95. Most students show a good deal of caution and self-control in their behavior.
96. Bermuda shorts, pin-up pictures, etc., are common on this campus.
97. Students pay little attention to rules and regulations.
98. Dormitory raids, water fights, and other student pranks would be unthinkable.
99. Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others.
100. Rough games and contact sports are an important part of intramural athletics.

THANK YOU SO MUCH FOR YOUR GENEROUS PARTICIPATION IN THIS STUDY

CUES Scoring Key with Deleted Items

Practicality	Scholarship	Community	Awareness	Propriety	Campus Morale	Quality of Teaching
1. T	11. T	21. T	31. T	41. T	2. T	1. F
2. T	12. T	22. T	32. T	* 42. F	+ 10. F	12. T
3. T	13. T	* 23. T	33. T	43. F	14. T	15. T
4. T	14. T	* 24. T	34. T	44. F	22. T	20. F
5. T	15. T	* 25. T	35. T	45. F	* 25. T	* 25. T
* 6. T	16. F	26. T	* 36. T	* 46. F	27. T	61. T
7. T	* 17. T	27. T	37. T	47. F	* 28. T	* 65. T
* 8. T	18. F	* 28. T	38. T	48. T	* 29. T	* 66. F
9. F	* 19. T	* 29. T	* 39. T	49. F	31. T	* 73. T
10. T	20. F	30. F	* 40. T	50. T	35. T	75. F
					37. T	* 79. F
51. T	61. T	71. T	81. T	* 91. T		
* 52. T	62. T	* 72. T	82. F	* 92. F	50. T	
53. T	* 63. T	* 73. T	83. T	93. F	61. T	
* 54. T	64. T	74. T	* 84. T	94. T	62. T	
* 55. T	* 65. T	75. F	85. T	95. T	* 63. T	
56. T	* 66. T	76. T	86. T	* 96. F	74. T	
57. T	67. T	77. T	* 87. T	97. F	75. F	
* 58. T	68. T	78. T	88. T	98. T	80. T	
* 59. T	69. T	* 79. F	* 89. T	99. F	82. F	
60. T	70. T	80. T	90. F	100. F	83. T	
					97. F	
					99. F	

+These items are scored false on these two scales; all other items are scored as keyed for CUES, Second Edition.
 *These items were eliminated due to poor discrimination.

CAUTION — AVOID PLACING ANY MARKS AMONG THE BLACK TIMING LINES

1. _____

2. _____

Indicate response by placing a mark between the guidelines as shown in the example. Use HB pencil. Don't make marks longer than guidelines.

Example

_____ i t f _____

I. D. NUMBER

170

[illegible]

PART ONE

a	b	c	d	e
a	b	c	d	e
a	b	c	d	e
a	b	c	d	e

PART TWO

[illegible]

26	t	f			
27	t	f			
28	t	f			
29	t	f			
30	t	f			
31	t	f			
32	t	f			
33	t	f			
34	t	f			
35	t	f			
36	t	f			
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98	t	f			
99	t	f			
100	t	f			

APPENDIX D

COLLEGE AND GROUP SCORES PRIOR TO DELETION OF 33 ITEMS

Table 21

Scores for All Colleges as Units Using Method One with Cumulative Percentages from Pace's 100 Colleges and Universities

Scales														
	Practicality		Community		Awareness		Propriety		Scholarship		Campus Morale		Quality of Teaching ...	
	Score	Cum%	Score	Cum%	Score	Cum%	Score	Cum%	Score	Cum%	Score	Cum%	Score	Cum%
College A	15	28	24	50	21	62	14	46	23	46	28	74	19	89
College B	17	41	18	20	22	64	23	84	19	31	26	65	17	80
College C	15	28	16	17	24	70	16	54	17	25	23	46	18	82
College D	16	36	13	8	21	62	9	15	23	46	16	11	15	68
Possible Scale Range	0 - 40		0 - 40		0 - 40		0 - 40		0 - 40		0 - 44		0 - 22	

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